

VPDES PERMIT PROGRAM FACT SHEET

This document gives pertinent information concerning the issuance of the VPDES permit listed below. This permit is being processed as a **Large Concentrated Animal Feeding Operation (CAFO)** permit for a facility that was previously issued an individual VPA permit. The effluent limitations contained in this permit will maintain the Water Quality Standards of 9 VAC 25-260 et. seq (effective 1/6/11). The discharge results from release of storm water and wastewaters from an existing CAFO via Discharge Points 001, 002, 003, 004 and 005.

1. PERMIT NO.: VA0C50002 EXPIRATION DATE: NA - New issuance
2. FACILITY NAME AND LOCAL MAILING ADDRESS FACILITY LOCATION ADDRESS (IF DIFFERENT)

Murphy Brown LLC, Farm 6-8 (Dory Farm) 27409 Berlindory Road
P. O. Box 1240 Wakefield, VA 23888
Waverly, VA 23890

<u>CONTACT AT FACILITY:</u>	<u>CONTACT AT LOCATION ADDRESS</u>
<u>NAME:</u> R.O. Britt	<u>NAME:</u>
<u>TITLE:</u> Sr. Env. Resource Mgr.	<u>TITLE:</u>
<u>PHONE:</u> (804)-834-2109	<u>PHONE:</u> ()
<u>EMAIL:</u> robritt@murphybrownllc.com	<u>EMAIL:</u>

3. OWNER CONTACT: (TO RECEIVE PERMIT) CONSULTANT CONTACT:
- | | |
|--|-------------------|
| <u>NAME:</u> Mr. Kraig Westerbeek | <u>NAME:</u> |
| <u>TITLE:</u> Assist. VP of Env./Health/Safety | <u>FIRM NAME:</u> |
| <u>COMPANY NAME:</u> (IF DIFFERENT) | <u>ADDRESS:</u> |
| <u>ADDRESS:</u> | |

<u>PHONE:</u> (910)-293-3434	<u>PHONE:</u> ()
<u>EMAIL:</u>	<u>EMAIL:</u>

4. PERMIT DRAFTED BY: DEQ, Water Permits, Regional Office
- Permit Writer(s): RE Smithson Date(s): 04/14 - 5/14

Reviewed By: M.H. Sauer

Date(s): 5/8-15/14; 5/21/14

5. PERMIT ACTION:

(X) Issuance () Reissuance () Revoke & Reissue () Owner Modification
() Board Modification () Change of Ownership/Name [Effective Date:]

The existing permit for the site was issued as VPA01075, which was issued on May 9, 2001 and expired on May 9, 2011

6. SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS:

Attachment <u>1</u>	Site Inspection Report/Memorandum
Attachment <u>2</u>	Discharge Location/Topographic Map
Attachment <u>3</u>	Schematic/Site Map/Water Balance
Attachment <u>4</u>	Discharge/Outfall Description
Attachment <u>5</u>	TABLE II - Effluent Monitoring/Limitations
Attachment <u>6</u>	Special Conditions Rationale
Attachment <u>7</u>	Receiving Waters Info./Tier Determination/STORET Data/Stream Modeling/303(d) Listed Segments
Attachment <u>8</u>	TABLE III(a) and TABLE III(b) - Change Sheets
Attachment <u>9</u>	NPDES Industrial Permit Rating Worksheet
Attachment <u>10</u>	Chronology Sheet
Attachment <u>11</u>	Other Documentation
Attachment <u>12</u>	Definition of Terms

APPLICATION COMPLETE: 04/16/14 (outfall map locations rec.)

7. PERMIT CHARACTERIZATION: (Check as many as appropriate)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Existing Discharge | <input checked="" type="checkbox"/> Effluent Limited |
| <input type="checkbox"/> Proposed Discharge | <input type="checkbox"/> Water Quality Limited |
| <input type="checkbox"/> Municipal | <input type="checkbox"/> WET Limit |
| SIC Code(s) | <input type="checkbox"/> Interim Limits in Permit |
| <input checked="" type="checkbox"/> Industrial | <input type="checkbox"/> Interim Limits in Other Document |
| SIC Code(s) 0213 | <input type="checkbox"/> Compliance Schedule Required |
| <input type="checkbox"/> POTW | <input type="checkbox"/> Site Specific WQ Criteria |
| <input type="checkbox"/> PVOTW | <input type="checkbox"/> Variance to WQ Standards |
| <input checked="" type="checkbox"/> Private | <input type="checkbox"/> Water Effects Ratio |
| <input type="checkbox"/> Federal | <input checked="" type="checkbox"/> Discharge to 303(d) Listed Segment |
| <input type="checkbox"/> State | <input type="checkbox"/> Toxics Management Program Required |
| <input type="checkbox"/> Publicly-Owned Industrial | <input type="checkbox"/> Toxics Reduction Evaluation |
| | <input type="checkbox"/> Storm Water Management Plan |
| | <input type="checkbox"/> Pretreatment Program Required |
| | <input type="checkbox"/> Possible Interstate Effect |
| | <input type="checkbox"/> CBP Significant Dischargers List |

8. RECEIVING WATERS CLASSIFICATION: River basin information.

Outfall No(s): 001, 002, 003, 004 and 005

Receiving Stream: 001-002 Unnamed Trib. to Indigo Branch (Round Hill Swamp) &
003-005 Unnamed Trib. to Horsepen Branch (Round Hill Swamp)
Basin: Chowan River and Dismal Swamp
Subbasin: Chowan River
Section: 2
Class: VII
Special Standard(s): NEW-21
Tidal: NO
7-Day/10-Year Low Flow: MGD
1-Day/10-Year Low Flow: MGD
30-Day/5-Year Low Flow: MGD
Harmonic Mean Flow: MGD

OUTFALL NUMBER	Latitude	Longitude	Name of Nearest Potential Receiving Stream	Area Contributing Flow
001	36°58'37.87" N	76°50'48.91"W	UT to Indigo Branch	Farm 1 Production Facility
002	36°58'40.66" N	76°50'35.85"W	UT to Indigo Branch	Farm 1 Production Facility
003	36°58'21.66" N	76°50'46.51"W	UT to Horsepen Branch	Farm 2 Production Facility
004	36°58'31.07" N	76°50'54.58"W	UT to Horsepen Branch	Farm 2 Production Facility
005	36°58'24.06" N	76°50'58.56"W	UT to Horsepen Branch	Farm 2 Production Facility

9. FACILITY DESCRIPTION: Describe the type facility from which the discharges originate.

EXISTING industrial discharge resulting from a swine wean to finishing production facility. Dory Farm 6-8 consists of 22,050 swine weighing 55 pounds or over and 9,450 swine weighing under 55 pounds (31,500 total). Approximately 30.6 MG of wastewater is generated at this site annually and 539 acres of land under the control of the applicant are available for land application of this wastewater to Bermuda hay and row crops (254 acres owned by Murphy Brown, 285 acres leased from Va Carolina Holding Co.). Effluent is treated in a two stage anaerobic lagoon system (3 primary anaerobic lagoons are transferred to a common secondary lagoon). Samples (taken in March, June and September) to establish the nutrient content of either a primary or the common secondary lagoon, depending on lagoon levels, weather conditions and crop nutrient needs, however irrigation is typically conducted with effluent from the secondary lagoon. Storm water runoff is collected in one of five secondary

containment basins (grass covered earthen structures that collect runoff from production area).

10. LICENSED OPERATOR REQUIREMENTS: (X) No () Yes Class:

11. RELIABILITY CLASS: Industrial Facility - NA

12. SITE INSPECTION DATE: 05/23/13 REPORT DATE: 06/02/13

Performed By: Clyde Gantt

SEE ATTACHMENT 1

13. DISCHARGE(S) LOCATION DESCRIPTION: Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.

Name of Topo: Vicksville & Manry Quadrant No.: 38D & 38A

SEE ATTACHMENT 2

14. ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.

Narrative:

Storm water runoff is collected in one of five secondary containment basins (grass covered earthen structures that collect runoff from production area). Each BMP is inspected daily to ensure that there are no visible contaminants prior to being released by gate valve to the receiving ditch/stream. If contaminants are observed, a recovery process is implemented prior to valve opening to release rainwater. These procedures will be addressed in the Farm Operating Manual.

SEE ATTACHMENT 3

15. DISCHARGE DESCRIPTION: Describe each discharge originating from this facility.

SEE ATTACHMENT 4

Discharge Points	DISCHARGE SOURCE	TREATMENT	ADDITIONAL BEST MANAGEMENT PRACTICES DISCHARGE SOURCE
001&002	Production Area - Farm 6	Secondary Containment	Nutrient Management Plan, Buffers, Setbacks, Conservation Tillage, Grass Filter
003&004	Production Area - Farm 8	Secondary Containment	
005	Production Area - Farm 7	Secondary Containment	

16. Discharge and Pollution Management Authorization:

The facility is authorized to manage pollutants at the locations identified in the permit application and the facility's Nutrient Management Plan (NMP), and is authorized to discharge:

- from the facility's production area, manure, litter or process wastewater to surface waters of the state in the case of an overflow caused by a storm event greater than a 25-year, 24-hour storm;
- from areas identified in the permit application as discharge points, manure, litter or process wastewater. The discharge points shall be monitored as

c. from the land application area(s), agricultural storm water.

The NMP is enforceable through this permit.

COMBINED TOTAL FLOW:

TOTAL: .024 MGD (for public notice)

PROCESS FLOW: N/A MGD (IND.)

NONPROCESS/RAINFALL DEPENDENT FLOW: .024 MGD (Est.)

DESIGN FLOW: N/A MGD (MUN.)

17. Monitoring Requirements:

Stormwater Monitoring:

Rationale: Stormwater Monitoring is required of the permittee by 9VAC25-151-70 Part I.A. Visual monitoring of stormwater shall be performed at the outfalls listed in 15. above per the following table. The permit contains several conditions under which the monitoring shall be performed, including:

- a. All storm water discharge samples (except snowmelt samples) shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging from the facility to surface waters. All samples (except snowmelt samples) shall be collected from the discharge resulting from a measurable storm event.
- b. The examination of the sample shall be performed at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December, shall be conducted in a well-lit area and shall document observations.
- c. The sampling requirement can be waived if documentation is completed that demonstrates either that no storm event resulted in runoff during normal working hours from the facility during a monitoring quarter; or, that adverse weather conditions prevent the collection of samples, in which case a substitute sample may be taken during a qualifying storm event in the next monitoring period.

FEATURES TO BE MONITORED IN THE PRODUCTION AREA					MONITORING REQUIREMENTS	
					Frequency *	Sample Type **
Discharge points:					Quarterly	Grab
001	36°51'23.47" N	77°02'23.27"W	UT to Indigo Branch	Farm 6 Production Fac		
002	36°51'20.45" N	77°02'08.62"W	UT to Indigo Branch	Farm 6 Production Fac		
003	36°51'47.91" N	77°02'29.07"W	UT to Horsepen Branch	Farm 8 Production Fac		
004	36°51'54.06" N	77°02'17.51"W	UT to Horsepen Branch	Farm 8 Production Fac		
005	36°52'00.55" N	77°01'55.59"W	UT to Horsepen Branch	Farm 7 Production Fac		
•						
<u>Notes:</u> * The visual inspection shall be made during daylight hours (e.g., normal working hours). ** No analytical tests are required to be performed on the samples. *** Surface waters as defined in Attachment 13-Definition of Terms.						

Best Management Practice(s) (BMPs) Monitoring:

Rationale: BMP Monitoring is required of the permittee by 9VAC25-31-200 E.1.f to identify appropriate site specific conservation practices to be implemented, including appropriate buffers or equivalent practices, to control runoff of pollutants to surface waters of the State.

Visual monitoring of the BMPs (identified in the permit application and the Farm Operating Manual) that are associated with the the outfalls listed in 15. above per the following table. The permit contains several conditions under which the monitoring shall be performed, including:

- a. The BMPs shall be observed at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December and the observations shall be documented.
- b. The visual inspection of the BMP(s) shall be performed in conjunction with storm water discharge sample examination events as required in Part I B.1. a., and
- c. may be waived if adverse weather conditions prevent the visual inspection of the BMP(s) and are appropriately documented.

The Permittee shall correct any deficiencies found as a result of the visual inspections and document any actions taken to correct deficiencies. Deficiencies include failures of the BMP(s) that increase the probability of the contamination of water due to the exposure of the pollutants managed within the production area.

FEATURE TO BE MONITORED AND INSPECTED IN THE PRODUCTION AREA	MONITORING REQUIREMENTS
	Inspection Frequency *
Best Management Practices **: <ul style="list-style-type: none"> as indicated in the Farm Operating Manual 	Quarterly
<u>Notes:</u> * The visual inspection shall be made during daylight hours (e.g., normal working hours). ** Best management practice as defined in Attachment 13-Definition of Terms.	

Monitoring of Other Features:

Rationale: Monitoring is required of the permittee by 9VAC25-31-30 (40 CFR 412). The federal effluent limitation guidelines require the permittee to inspect items such as waste storage structures and water lines for leaks or failures.

Visual monitoring of other features (listed in the table below) for leaks or failures that will increase the probability of the contamination of water due to exposure of pollutants managed within the production area shall be performed as specified below. The Permittee shall correct any deficiencies found as a result of the visual inspections and document any actions taken to correct deficiencies. Deficiencies include leaks from or failures of the features that will increase the probability of the contamination of water due to the exposure of the pollutants managed within the production area.

FEATURE TO BE MONITORED AND INSPECTED IN THE PRODUCTION AREA	MONITORING REQUIREMENTS
	Inspection Frequency *
Water lines: including drinking and cooling water lines	Daily
All waste** treatment or storage structures and the associated waste transfer system ***	Weekly
Storm water devices/structures: (including)****	Weekly
<ul style="list-style-type: none"> storm water diversion devices and runoff diversion structures, and devices which channel contaminated storm water***** to any wastewater or manure treatment or storage structure storm water***** and runoff channels which lead to the discharge points 	Weekly
Notes: * The visual inspection shall be made during daylight hours (e.g., normal working hours). ** Waste as defined in Attachment 13-Definition of Terms. *** The inspection shall record the level in liquid impoundments as indicated by a depth marker as required by Part II B.4. **** Storm water diversion devices and runoff diversion structures as defined in Attachment 13-Definition of Terms. ***** Storm water as defined in Attachment 13-Definition of Terms.	

Waste Monitoring:

Rationale: Sections 62.1-44.17:1 E 4 and 9VAC25-192-70 and 9VAC25-31-200 E 1. The specific waste monitoring requirements are stipulated by 9VAC25-192-70. Additionally, 9VAC25-31-200 E 1 requires the permittee to establish proper protocols to monitor waste.

Waste Monitoring shall be performed per the following table; additional waste monitoring may be required in the facility's approved Nutrient Management Plan, and analysis of the waste shall be according to methods specified in the facility's approved Nutrient Management Plan.

PARAMETERS	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
Total Kjeldahl Nitrogen	NL	*	2/year	Composite
Ammonia Nitrogen	NL	*	2/year	Composite
Total Phosphorus	NL	*	2/year	Composite
Total Potassium	NL	*	2/year	Composite
Calcium	NL	*	2/year	Composite
Magnesium	NL	*	2/year	Composite
Moisture Content	NL	%	2/year	Composite
Notes: NL = No limit, this is a monitoring requirement only. * Parameters for waste may be reported as a percent, as lbs/ton or lbs/1000 gallons, or as ppm where appropriate.				

Soil Monitoring:

Rationale: Sections 62.1-44.17:1 E 4 and 9VAC25-192-70 and 9VAC25-31-200 E 1. The specific soils monitoring requirements are stipulated by 9VAC25-192-70. Additionally, 9VAC25-31-200 E 1 requires the permittee to establish proper protocols to monitor soils.

Soil monitoring at the land application sites shall be performed per the following table; additional soils monitoring may be required in the facility's approved Nutrient Management Plan. Soil monitoring shall be conducted at a depth of between 0-6 inches, unless otherwise specified in the facility's approved Nutrient Management Plan, and analysis of soil shall be according to methods specified in the facility's approved Nutrient Management Plan.

PARAMETER	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
pH	NL	SU	1/3 years	Composite *
Phosphorus	NL	ppm or lbs/ac	1/3 years	Composite *
Potassium	NL	ppm or lbs/ac	1/3 years	Composite *
Calcium	NL	ppm or lbs/ac	1/3 years	Composite *
Magnesium	NL	ppm or lbs/ac	1/3 years	Composite *

Notes: NL = No limit, this is a monitoring requirement only.
 SU = Standard Units
 * Specific sampling requirements are found in the facility's approved Nutrient Management Plan.

Groundwater Monitoring:

Rationale: Sections 62.1-44.17:1 E 4 and 62.1-44.21 and 9VAC25-192-70 and 9VAC25-280-20 and 9VAC25-280-60. The specific ground water monitoring requirements are stipulated by 9VAC25-192-70. For 9VAC25-280-20: Except where otherwise specified, ground water quality standards shall apply statewide and shall apply to all ground water occurring at and below the uppermost seasonal limits of the water table. In order to prevent the entry of pollutants into ground water occurring in any aquifer, a soil zone or alternate protective measure or device sufficient to preserve & protect present and anticipated uses of ground watershall be maintained at all times. 9VAC25-280-60 Ground water criteria, although not mandatory, also provide guidance in preventing ground water pollution. Also, State Water Control Law 62.1-44.21 authorizes the Board to request information needed to determine the discharge's impact on State waters. Groundwater Monitoring for parameters of concern will indicate whether possible lagoon/pond seepage is resulting in violations to the State Water Control Board's Ground Water Standards.

The Permittee shall develop and submit a Groundwater Monitoring Plan for approval by the Department within 90 days of the effective date of this permit, and the Groundwater Monitoring Plan shall include at a minimum the following information:

- (a) A site characterization report and other background data to support the alternative methods and practices to be used at the site,
- (b) Procedures and monitoring protocols to ensure appropriate methods and practices are being utilized when monitoring groundwater
- (c) Well design, installation protocol and proposed well locations including the completion of the Department's GW-2 form for each new well installed at the facility and baseline source discrimination geochemistry shall be completed on each new well,
- (d) Sampling protocols including, but not limited to proposed parameters, frequency of monitoring, sample type, units of measure, well purging procedures prior to sampling, static well level measurements, etc,
- (e) Procedures used to document the condition of the well screens including, but not limited to performing camera surveys of each well once every three years,
- (f) Procedures used to document the condition of the waste storage or treatment facilities liner including, but not limited to a description of the leak detection technologies used to monitor the liner and the frequency of monitoring,
- (g) Sampling and monitoring data evaluation methodology, including action levels that will trigger initiation of remedial actions;
- (h) A proposed action plan to ensure appropriate measures are taken where,
 - (a) monitoring results demonstrate potential noncompliance with the permit, or

(b) a leak is detected during monitoring of the waste storage or treatment facility liner, and

(i) Well close out procedures for well abandonment.

Groundwater Monitoring shall be performed per the following table; new wells shall be monitored for the first year at a frequency of 1/month in order to establish baseline sampling data. After 12 consecutive samples where results indicate no exceedances of applicable groundwater criteria, the permittee may request a reduction in monitoring frequency to 1/3 months. After 4 consecutive quarterly samples where results indicate no exceedances of applicable groundwater criteria, the permittee may request a reduction in monitoring frequency to 2/year for the remainder of the permit term;

GROUNDWATER MONITORING

PARAMETER	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
Static Water Level	NL	.01 ft	2/year *	Measured
Temperature	NL	°C/°F	2/year *	Grab
Turbidity	NL	NTU	2/year *	Grab
Ammonia Nitrogen	NL	mg/l	2/year *	Grab
Nitrate Nitrogen	NL	mg/L	2/year *	Grab
pH	NL	SU	2/year *	Grab
Conductivity	NL	umhos/cm	2/year *	Grab
<p><u>Note:</u> NL = No limit, this is a monitoring requirement only.</p> <p>* see Part I.B.4.b.(4) above for new well monitoring frequency</p> <p>Prior to sampling wells shall be purged by either allowing a minimum of 3 well volumes to be removed or until well purging parameters (pH, temperature and conductivity) stabilize to plus or minus 10%.</p>				

Additional groundwater monitoring may be required in the facility's approved Nutrient Management Plan. The analysis of the groundwater shall be performed by a laboratory accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) in accordance with 1VAC30-46-20. The field sampling, testing and measurements, when performed at the site where the sample is taken, are not subject to the VELAP requirement.

18. Recordkeeping Requirements:

Rationale: Required by: § 62.1-44.17:1 E 4 and 9VAC25-192-70 and 9VAC25-31-100 J 1 and 40 CFR 412.37 (b) and (c). The specific recordkeeping requirements are required by 9VAC25-192-70. The Permittee shall maintain the information used to complete the permit application and the information collected per the preceding requirements in 17. (above), as well as the following information:

- a. Any additional waste, soils or groundwater monitoring data collected during the life of this permit;
- b. Records identified in the approved Farm Operating Manual that will be maintained to document the implementation and management of the items in the Manual;
- c. Land application records;
- d. Records documenting the current design of any manure storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity;
- e. The date, time, and estimated volume of any overflow from a manure or waste storage structure (In the event that an overflow occurs, the Permittee must report the overflow to the Department and report all occurrences in the annual report), and
- f. Methods of mortality management and practices used to prevent the discharge of pollutants to surface water

The records listed above shall be retained at the facility for a period of five years from the date the records are created and made available to Department personnel upon request.

19. Reporting Requirements:

Rationale: 9VAC25-31-200 E 4. The specific reporting requirements are required by 9VAC25-31-XXX. The Permittee shall submit an annual report to the director by February 15 of each year for the previous calendar year or part thereof since covered by this permit. The annual report shall be submitted on a form provided by the Department or in a comparable format and include the following information:

- a. The number and type of animals, whether in open confinement or housed under roof;
- b. Estimated amount of total manure and process generated by the facility in the previous 12 months (tons/gallons);
- c. Estimated amount of total manure and process wastewater transferred to other persons by the Permittee in the previous 12 months (tons/gallons);
- d. Total number of acres for land application covered by the facility's approved Nutrient Management Plan;
- e. Total number of acres under control of the Permittee that were used for land application of manure and process wastewater in the previous 12 months;
- f. Summary of all manure and process wastewater discharges from the production area that entered or could have been expected to enter state waters in the previous 12 months, including date, time, and approximate volume; cause of discharge and corrective action taken or to be taken to address the cause of the discharge;
- g. A statement indicating that the current version of the facility's Nutrient Management Plan was developed by a Department of Conservation and Recreation (DCR) certified Nutrient Management Planner and approved by the DCR;
- h. Any other results of monitoring, land application or records generated as described in 18. (above)

20. STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS:

(Check all which are appropriate)

- ☒ State Water Control Law
- ☒ Clean Water Act
- ☒ VPDES Permit Regulation (9 VAC 25-31-10 et seq.)
- ☒ EPA NPDES Regulation (Federal Register)
- ☐ EPA Effluent Guidelines (40 CFR 133 or 400 - 471)
- ☒ Water Quality Standards (9 VAC 25-260-5 et seq.)
- ☐ Wasteload Allocation from a TMDL or River Basin Plan

21. EFFLUENT LIMITATIONS/MONITORING: Provide all limitations and monitoring requirements being placed on each outfall.

SEE TABLE II - ATTACHMENT 5

22. EFFLUENT LIMITATIONS/MONITORING RATIONALE: Attach any analyses of an outfall by individual toxic parameter. As a minimum, it will include: statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); wasteload allocation (acute, chronic and human health); effluent limitations determination; input data listing. Include all calculations used for each outfall and set of effluent limits and those used in any model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limiting internal waste streams and indicator pollutants. Attach chlorine mass balance calculations, if performed. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

DEQ Regional and Central Office staff discussed the naturally low dissolved oxygen in the receiving stream and whether dissolved oxygen monitoring was appropriate in the permit for the storm water outfalls. Because of the expected nature of the storm water at the facility (storm water not contaminated by process activities, not combined with other wastewaters and not held in the storm water ponds for an extended period), staff felt dissolved oxygen monitoring was not necessary at this time. Future DEQ inspections will focus on confirming the conditions on which this determination is based. If future inspections determine that the nature of the storm water is not as described, dissolved oxygen monitoring on the storm water outfalls may be considered.

OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:

VARIANCES/ALTERNATE LIMITATIONS: Provide justification or refutation rationale for requested variances or alternatives to required permit conditions/limitations. This includes, but is not limited to: waivers from testing requirements; variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

N/A

SUITABLE DATA: In what, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

No suitable effluent data were available .

ANTIDEGRADATION REVIEW: Provide all appropriate information/calculations for the antidegradation review.

The receiving stream has been classified as tier 1; therefore, no further review is needed. Permit limits have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

ANTIBACKSLIDING REVIEW: Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information.

There are no backsliding issues to address in this permit as this is a new issuance.

23. SPECIAL CONDITIONS RATIONALE: Provide a rationale for each of the permit's special conditions.

SEE ATTACHMENT 6

24. **TOXICS MONITORING/TOXICS REDUCTION AND WET LIMIT SPECIAL CONDITIONS RATIONALE:** Provide the justification for any toxics monitoring program and/or toxics reduction program and WET limit.

N/A

25. **SLUDGE DISPOSAL PLAN:** Provide a description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.

Lagoon sludge handling procedures will be addressed in the Farm Operating Manual.

26. **MATERIAL STORED:** List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.

None

27. **RECEIVING WATERS INFORMATION:** Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260-5 et seq.)]. Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied. Attach any memoranda or other information which helped to develop permit conditions (i.e. tier determinations, PReP complaints, special water quality studies, STORET data and other biological and/or chemical data, etc.

OUTFALL NUMBER	Latitude	Longitude	Name of Nearest Potential Receiving Stream	Area Contributing Flow
001	36°51'23.47" N	77°02'23.27"W	UT to Indigo Branch	Farm 6 Production Facility
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003	36°51'47.91" N	77°02'29.07"W	UT to Horsepen Branch	Farm 8 Production Facility
004	36°51'54.06" N	77°02'17.51"W	UT to Horsepen Branch	Farm 8 Production Facility
005	36°52'00.55" N	77°01'55.59"W	UT to Horsepen Branch	Farm 7 Production Facility

Each outfall receives prior secondary containment BMP/visual observation. Storm water runoff is collected in one of five secondary containment basins (grass covered earthen structures that collect runoff from production area). Each BMP is inspected daily to ensure that there are no visible contaminants prior to being released by gate valve to the receiving stream. Additional BMPs include nutrient mgt.plan, buffers, setbacks, conservation tillage and grass filter strips.

28. **305(b)/303(d) Listed Segments:** Indicate if the facility discharges to a segment that is listed on the current 303(d) list and, if so, provide all appropriate information/calculations.

This facility discharges directly to an unnamed tributary to a branch that drains to the Blackwater River via Round Hill Swamp. This receiving stream segment has been listed in Category 5 of the 305(b)/303(d) list for non-attainment of mercury in fish tissue (consumption advisory for the Blackwater and its tributaries). A TMDL has not been prepared or approved for this stream segment. The permit contains a TMDL reopener clause which will allow the it to be modified, in compliance with Section 303(d)(4) of the Act once a TMDL is approved.

SEE ATTACHMENT 7

29. CHANGES TO PERMIT: Use TABLE III(a) to record any changes from the previous permit and the rationale for those changes. Use TABLE III(b) to record any changes made to the permit during the permit processing period and the rationale for those changes [i.e., use for comments from the applicant, VDH, EPA, other agencies and/or the public where comments resulted in changes to the permit limitations or any other changes associated with the special conditions or reporting requirements].

SEE ATTACHMENT 8

30. NPDES INDUSTRIAL PERMIT RATING WORKSHEET:

TOTAL SCORE: 10 SEE ATTACHMENT 9

31. DEQ PLANNING COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from DEQ planning.

The discharge is not addressed in any planning document but will be included when the plan is updated.

32. PUBLIC PARTICIPATION: Document comments/responses received during the public participation process. If comments/responses provided, especially if they result in changes to the permit, place in the attachment.

VDH/DSS COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the Virginia Dept. of Health and the Div. of Shellfish Sanitation and noted how resolved.

By letter dated April 28, 2014, the VDH provided the following comments:
There are no public water supply water intakes located within 15 miles downstream or within one tidal cycle upstream of the existing project.

The DSS has no comments on the application/draft permit (page 84)

EPA COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA has no objections to the adequacy of the draft permit.

ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from an adjacent state and noted how resolved.

Not Applicable.

OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved.

Not Applicable.

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT: Document any comments received from other sources and note how resolved.

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation, and no comments were received.

Following the comment period, the Board will make a determination regarding the proposed issuance. This determination will become effective, unless the Director grants a public hearing. Due notice of any public hearing will be given.

33. ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:

For the permit action addressed by this fact sheet, this facility has been assigned the following classification for the purposes of determination of applicable permit processing and permit maintenance fees: LARGE CAFO FACILITY; INDUSTRIAL MINOR-NO STANDARD LIMITS.

Sanitary wastes from the employees are directed to a separate septic drain field.

This permit does not include a TMP.

This facility has no external process wastewater outfalls. It has five storm water valved outfalls that receive settling via a secondary containment basin/visual observation prior to discharge.

In accordance with §62.1-44.15:01.A.2 , 9VAC25-31-290.G.2 and GM11-005, a copy of the public notice for this permit was mailed to the Regional Planning District Commissions and local County officials.

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM



**ANIMAL FEEDING OPERATIONS
Inspection Checklist**

General Information

Permit Number: VPA01075 County/City: Southampton

Date of Permit Coverage: May 9, 2001(Extended)

Facility Name: Farms 6-8 (Dory)

Owner: Carroll's Foods Of VA, Inc. (Murphy-Brown)

Address: P.O. Box 1240 Phone: 804-834-2109

Waverly, VA 23890 Cell: (804) 731-9603

Inspection Scheduled: ☒ Yes ☐ No

Inspection Announced: ☒ Yes ☐ No

Inspection Date/Time: May 23, 2013 Photos taken? ☒ Yes ☐ No

Inspector: Clyde Gantt Certification Number: 563

Reviewed By/Date: Kenneth T. Raum / 06-03-13 *KTR*

Others Present: Mr. Jeff Francis – Complex Manager

Type Livestock: Swine: ☐ Farrow ☐ Feeder ☒ Finish ☐ Sow/Farrow to Finish

Number Confined: At Inspection 31,000 Reg. Statement 3050* NMP 31,500

Number of Housing Units: Each farm site has 11 Swine Houses @ 950 each.

DCR Training completed: ☒ Yes ☐ No Date: March 26, 2010

Comments / General Summary: *The number on the registration statement is for the previous farrow to finish operation. This facility is now a finishing operation only.

Inspection Summary Sheet

Permit #VPA01075

Items requiring action:	Corrective action needed:	Expected Completion Date:
1. None		
2.		

Recommendations
1. None
2.

Comments:

Feeding and Waste Storage Facilities -- Swine

Perimeter of housing units clear of vegetation: ☒ Yes ☐ No
Evidence of leaks or overflow from housing units: ☐ Yes ☒ No
Which housing units?

Type of waste collection system: ☐ Pull Plug ☐ Recirculation ☐ Sump
☐ Flush gutter ☒ Floor Over Pit ☐ Other _____

Method of carcass disposal: ☐ Burial ☐ Incineration ☒ Rendering

Type of waste storage facilities: ☒ Lagoon ☐ Pit ☐ Slurry Store
☐ Other_

Observed Freeboard (in):

Storage #6P	<u>36"</u>	Evidence of Overflow: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Storage #7P	<u>36"</u>	Evidence of Overflow: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Storage #7S	<u>51"</u>	Evidence of Overflow: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Storage #8P	<u>27"</u>	Evidence of Overflow: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Adequate vegetative cover on earthen berms: ☒ Yes ☐ No ☐ N/A
Visible marker for max/min operating levels: ☒ Yes ☐ No ☐ N/A
Trees/brush on berm: ☐ Yes ☒ No ☐ N/A
Evidence of erosion on berm: ☐ Yes ☒ No ☐ N/A
Evidence of burrowing animals: ☐ Yes ☒ No ☐ N/A

General Condition of Feeding and Waste Storage Facilities: No problems noted.

Nutrient Management Plan (NMP)NMP Approval Date: June 28, 2012 (Exp. 5/10/15)Planner: Kurt ElmerPhone: (804) 834-1224Copy of Approved NMP Available: ☒ Yes ☐ NoIs NMP Current (update 1/3 years): ☒ Yes ☐ No

(1/5 yrs. for some waste transfer only plans)

NMP Animal Units Exceeded: ☐ Yes ☒ NoPlan type: ☐ N-based ☒ P-based ☐ Waste Transfer only (following sections N/A)Waste Application Method: ☒ Traveling Gun ☐ Solid Set ☒ Center Pivot☐ Liquid Spreader ☐ Dry Manure Spreader ☐ Other _____Date of Last Calibration: Aug. 23, 2012Method of Calibration: Calibrated Flow MeterField Application Records Maintained: ☒ Yes ☐ No

Following information provided in records:

Crop: ☒ Yes ☐ NoDate(s) Applied: ☒ Yes ☐ NoIncorporation & type: ☒ Yes ☐ NoRate(s) Applied: ☒ Yes ☐ NoSupp. Fert. Applied: ☐ Yes ☐ No ☒ N/ALime Applied: ☐ Yes ☐ No ☐ N/AApplications comply with seasonal spreading schedule: ☒ Yes ☐ NoLand application performed on targeted fields: ☒ Yes ☐ NoIf no, adjustments made according to NMP Standards & Criteria ☐ Yes ☐ NoNMP Application Notes Followed: ☒ Yes ☐ No ☐ N/A
(Maximum application rates, cutting schedule, etc.)Yields In Approximate Range Provided by NMP: ☒ Yes ☐ NoCompliance with Other NMP Conditions: ☒ Yes ☐ No ☐ N/AComments: No problems noted.

Monitoring Requirements**WASTE**Monitored in accordance with required frequency: ☒ Yes ☐ No Freq. 2/YearSample(s) Collected By: Complex Manager or staffAnalyzed by: Clemson Univ. Date(s): March 21, 2013Proper Composite Sample Collected: ☒ Yes ☐ NoWaste analyses attached: ☐ Yes ☒ NoWaste Nutrient Value (N - P₂O₅ - K₂O):Type: Swine Manure Lagoon 7SSurface Application: 0.92 - 0.44 - 6.42 (lbs./1000gals)Incorporation: 1.37 - 0.44 - 6.42 (lbs./1000gals)**SOILS**Monitored in accordance with required frequency: ☒ Yes ☐ No Freq. YearlySample(s) Collected By: Complex Manager or staffAnalyzed By: VA Tech Date: Dec. 5, 2012Proper Compositing Protocol Used: ☒ Yes ☐ NoSamples Collected from each Field: ☒ Yes ☐ NoAre pHs in Agronomic Range for Intended Crops: ☒ Yes ☐ No**GROUNDWATER** ☒ Required - Complete Groundwater Monitoring Sheet ☐ N/AWater Withdrawal Reporting: ☒ Yes ☐ No
☐ N/A (< 10,000gpd)Comments: See quarterly reports for groundwater monitoring.

Application Field Data SheetNRCS Tract #: 2600Field #: 5Field Name: A-CGross Acres: 35.22Usable Acres: 35.22Crop - Current: Bermuda HayPrevious: Bermuda HayNext: Bermuda HayCrop Condition: ☐ Poor☒ Average ☐ Good☐ N/A (Harvested)

Crops Harvested and Utilized

☒ Yes ☐ No☐ N/A (Cover crop)Application Rate based on: ☐ Long term average ☒ Most recent analysis

Crop	Date Planted	Manure App. Date	Rate / ac	Amount applied	Incorporation Yes/ No	Yield
See attached spread sheet						

Nutrients from Waste (lbs./ac): 58 – 52 – 414Supplemental Nutrients (lbs./ac): 0 – 0 – 0Total Nutrients to Field (lbs./ac): 58 – 52 – 414NMP Allowable Loading (lbs./ac): 235 – 0 – 0**Field Conditions**Evidence of Buffers Breached by Waste: ☐ Yes ☒ NoEvidence of Runoff/Erosion: ☐ Yes ☒ No

Comments: This field is N limited, based on P-Index calculations. No problems were noted. Loading calculations are for the 2012 crop year. No manure was applied during the first quarter of 2013.

Application Field Data SheetNRCS Tract #: 26000Field #: 2Field Name: DGross Acres: 17.71Usable Acres: 17.71Crop - Current: Corn GrainPrevious: Rye CoverNext: Wheat GrainCrop Condition: ☐ Poor☒ Average ☐ Good☐ N/A (Harvested)

Crops Harvested and Utilized

☒ Yes ☐ No☐ N/A (Cover crop)Application Rate based on: ☐ Long term average ☒ Most recent analysis

Crop	Date Planted	Manure App. Date	Rate / ac	Amount applied	Incorporation Yes/ No	Yield
See attached spread sheet						

Nutrients from Waste (lbs./ac): 16 – 16 – 133Supplemental Nutrients (lbs./ac): 0 – 0 – 0Total Nutrients to Field (lbs./ac): 16 – 16 – 133NMP Allowable Loading (lbs./ac): 120 – 0 – 0**Field Conditions**Evidence of Buffers Breached by Waste: ☐ Yes ☒ NoEvidence of Runoff/Erosion: ☐ Yes ☒ No

Comments: This field is N limited, based on P-Index calculations. Loading calculations are for the 2012 crop year (Fescue Hay-Sorghum-Rye). No problems were noted.

Application Field Data SheetNRCS Tract #: 26000Field #: 1Field Name: H1Gross Acres: 58.25Usable Acres: 58.25Crop - Current: Wheat GrainPrevious: Corn GrainNext: Sorghum GrainCrop Condition: ☐ Poor☐ Average ☐ Good☒ N/A (Harvested)

Crops Harvested and Utilized

☒ Yes ☐ No☐ N/A (Cover crop)Application Rate based on: ☐ Long term average ☒ Most recent analysis

Crop	Date Planted	Manure App. Date	Rate / ac	Amount applied	Incorporation Yes/ No	Yield
See attached spread sheet						

Nutrients from Waste (lbs./ac): 97 - ? - ?Supplemental Nutrients (lbs./ac): 0 - 0 - 0Total Nutrients to Field (lbs./ac): 97 - ? - ?NMP Allowable Loading (lbs./ac): 130 - 0 - 0**Field Conditions**Evidence of Buffers Breached by Waste: ☐ Yes ☒ NoEvidence of Runoff/Erosion: ☐ Yes ☒ No

Comments: The phosphate and potassium loading was not calculated. This field is N limited, based on P-Index calculations. Loading calculations are for the 2012 crop year (Rye Cover-Corn Grain – Wheat Grain). No problems were noted.

MURPHY-BROWN (DORY)
VPA01075
CROP YEAR 2012 NUTRIENT LOAD CALCULATIONS - FIELD A-C
Bermuda Hay

DATE	Gal Applied	KGal/Acre	PAN lbs/ac	PAP lbs/ac	K lbs/ac
6/15/2012	177,375	5.04	5.49	4.13	32
6/16/2012	148,500	4.22	4.60	3.46	27
6/18/2012	181,500	5.16	5.62	4.23	33
6/19/2012	165,000	4.69	5.11	3.84	30
6/20/2012	181,500	5.16	5.62	4.23	33
6/25/2012	136,125	3.87	2.90	2.94	24
6/26/2012	156,750	4.45	3.34	3.38	27
6/27/2012	185,625	5.27	3.96	4.01	32
6/28/2012	103,125	2.93	2.20	2.23	18
6/29/2012	107,250	3.05	2.29	2.32	19
7/5/2012	33,000	0.94	0.70	0.71	6
7/6/2012	173,250	4.92	3.69	3.74	30
7/7/2012	189,750	5.39	4.04	4.10	33
7/8/2012	181,500	5.16	3.87	3.92	32
7/9/2012	103,125	2.93	2.20	2.23	18
7/27/2012	33,000	0.94	0.70	0.71	6
8/17/2012	24,750	0.70	0.53	0.53	4
8/22/2012	52,800	1.50	1.13	1.14	9
		66	58	52	414
Crop Year Totals		KGal/Acre	PAN lbs/ac	PAP lbs/ac	K lbs/ac

Manure Analysis Used

3/27/12: 1.09 - 0.82 - 6.40

6/22/12: 0.75 - 0.76 - 6.15

5/29/13 CG

24

MURPHY-BROWN FARMS 6-8 (DORY)
VPA01075
CROP YEAR 2012 NUTRIENT LOAD CALCULATIONS - FIELD D
FESCUE HAY-SORGHUM-RYE

DATE	Gal Applied	KGal/Acre	PAN lbs/ac	PAP lbs/ac	K lbs/ac
8/23/2012	181,500	10.25	7.69	7.79	63
8/24/2012	202,125	11.41	8.56	8.67	70
		22	16	16	133
Crop Year Totals		KGal/Acre	PAN lbs/ac	PAP lbs/ac	K lbs/ac

Manure Analysis Used
6/22/12: 0.75-0.76-6.15

ATTACHMENT 2

DISCHARGE LOCATION/TOPOGRAPHIC MAP

Murphy-Brown LLC.
Farms 6-8
Supplemental Out Flow Map



MB Dory Farm 6-8 38D

VICKSBURG QUADRANGLE
VIRGINIA
7.5 MINUTE SERIES (TOPOGRAPHIC)

21
5657 IV NW
(IVOR)

MANRY 1.3 MI

2'30"

319 2 430 000 FEET

320

321

77°00'

36°52'30"

200 000
FEET

4082

4081

4080

4079

50'

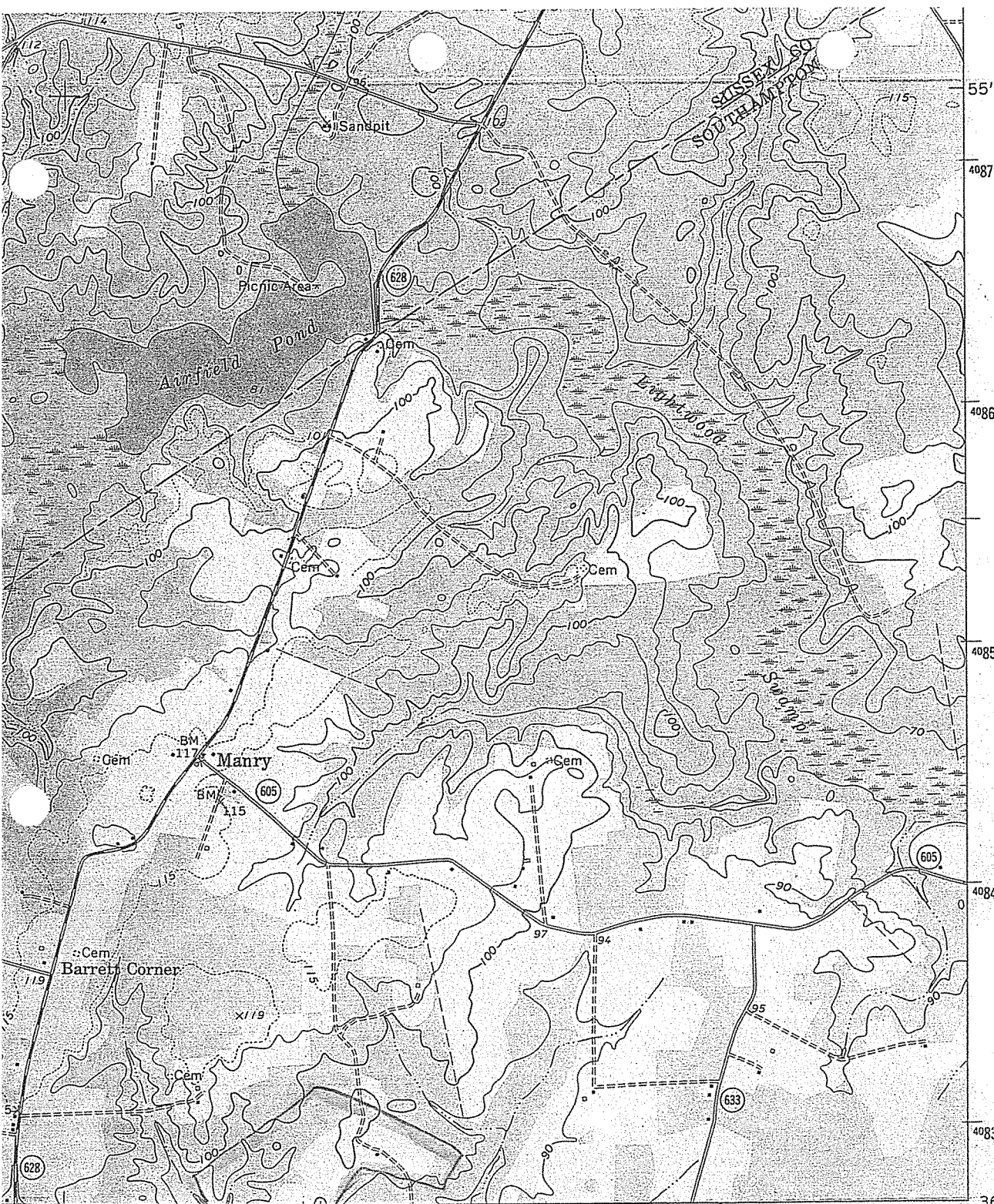
4078

IVOR U S 460 9 MI.

4077



28
MB Farm 6-8
Top 38A

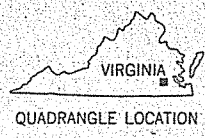


INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1971
321000m.E

ROAD CLASSIFICATION

Primary highway, all weather, hard surface	Light-duty road, all weather, improved surface
Secondary highway, all weather, hard surface	Unimproved road, fair or dry weather

U. S. Route State Route



QUADRANGLE LOCATION

MANRY, VA.
N3652.5—W7700/7.5

1969

AMS 5557 I NE—SERIES V834

Murphy-Brown LLC
 Farm 6
 Secondary Containment Diagram



Key

Secondary Containment Location	—————	Intermittent Stream	- - - - -
Containment Valve	⊗		
Inlet & Direction of Surface Water Flow	➔		

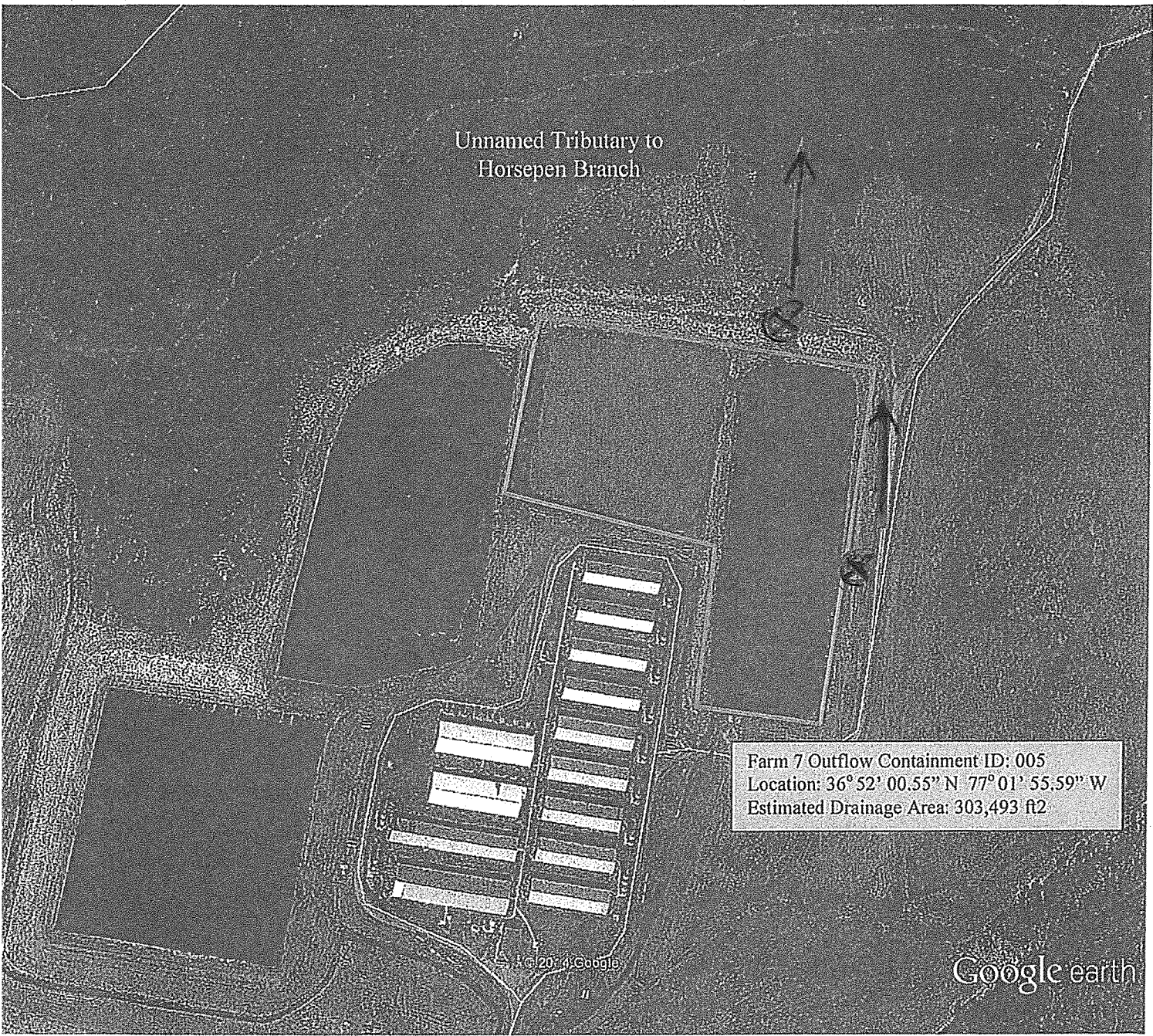
Murphy-Brown LLC
 Farm 8
 Secondary Containment Diagram



Key

Secondary Containment Location	—————	Intermittent Stream	- - - - -
Containment Valve	⊗		
nlet & Direction of Surface Water Flow	➡		

Murphy-Brown LLC
Farm 7
Secondary Containment Diagram

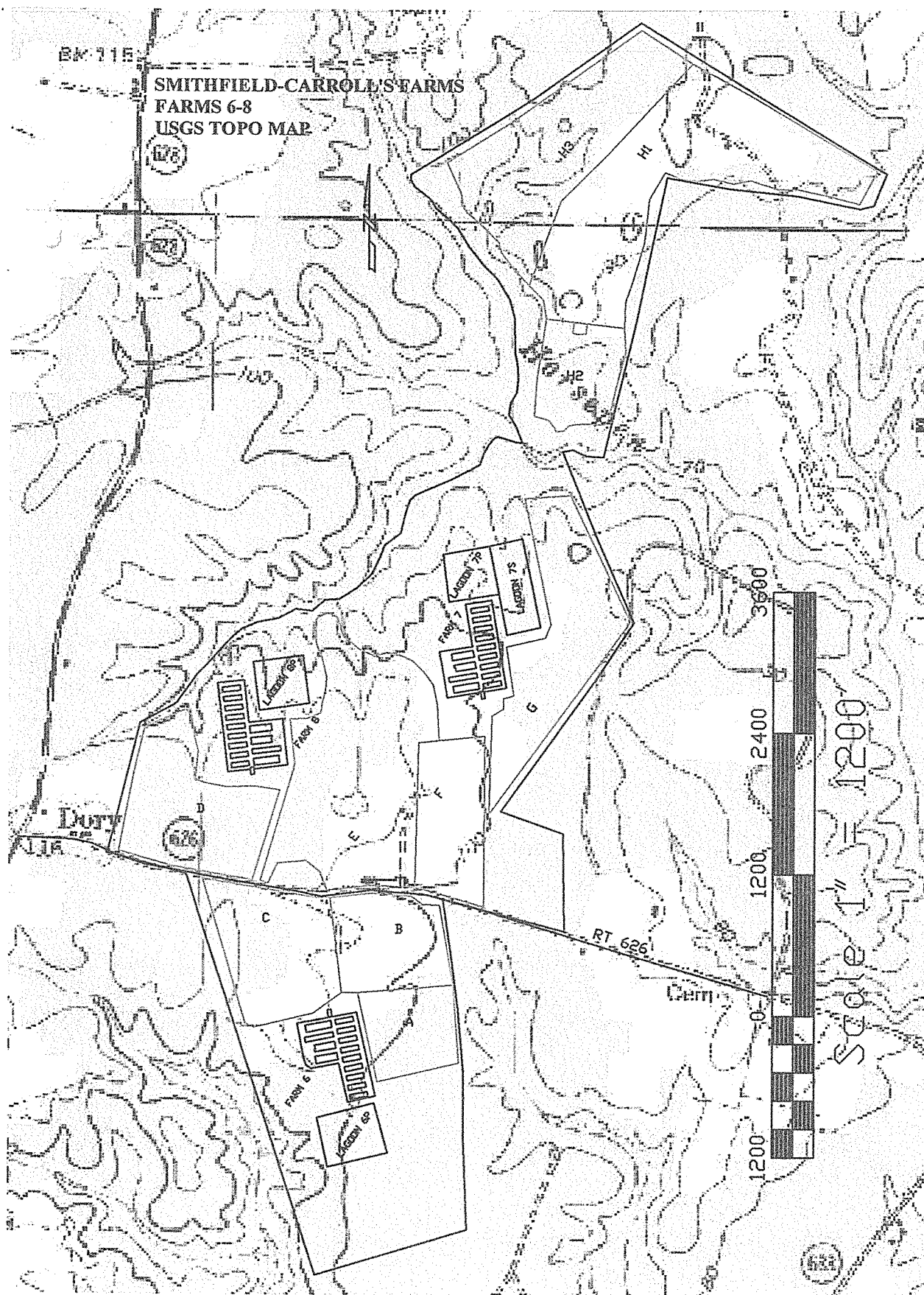


Key

Secondary Containment Location	—————	Intermittent Stream	- - - - -
Containment Valve	⊗		
inlet & Direction of Surface Water Flow	➡		

ATTACHMENT 3

SCHEMATIC/SITE MAP/
WATER BALANCE



2013

Calendar Year Pumping Data
&
Crop Yield Information

Farm 6-8

If the average (for fecal coli form, geometric mean) data collected for a site exceeds the established base line the possible causes will be evaluated and changes to the BMP Plan or BMP Monitoring Plan may be proposed. However, if average (for fecal coli form, geometric mean) data collected for a site decreases, then that average shall become the new baseline for that site.

Further evaluation of the BMP sites and the consistent problems of no flow have lead us to further evaluate our BMP Monitoring Plan. We are conducting a detailed review of all the BMP sites with the intent of proposing a revision to the BMP Monitoring Plan. We are currently working with DEQ on a new farm permit that will result in changes to the BMP Monitoring Program.

B. Yearly Wastewater Balance 2013

A table is attached which details the inputs and drawdowns to the storage structure. Both the input and drawdown data are limited. Total rainfall is recorded at each facility. Fresh water inputs are measured by a meter located between the well house and the farm. Freshwater input includes water used for both washing and animal consumption. The wash water will ultimately accumulate in the lagoon. The water consumed by the animals takes the form of manure, a portion is retained by the animal, and a portion is lost to respiration by the animal. Although these latter factors are not measured, the freshwater input is roughly equal to the manure output in volume. Also included are water volumes transferred to and from other farms for freeboard management.

Drawdown is the total of the gallons pumped from the lagoon, plus that which evaporates. The gallons pumped are accurate, as equipment calibration allows measurement of the total flow when pumping. Evaporation is computed here using the average lake evaporation in the subject county, multiplied by the surface area of the lagoon. The total is reduced by 10% to account for differences between evaporation of fresh water versus lagoon water (VA DCR Nutrient Management Handbook Table 6-8, July 1993). Actual evaporation will be affected by 1) fluctuating lagoon levels which vary the surface area, and 2) weather extremes.

A difference of approximately 3321809 gallons greater inputs than drawdown is computed with the methodology described above. It should be noted that, this method does not include starting and ending freeboard levels.

C. Annual Nutrient Loading

The 2013 Calendar Year Irrigation Summary is attached which details the plant available nitrogen (PAN) and/or the plant available phosphorus (PAP) applied to each crop field.

Fields with greater than 100% PAN applied: None

D. Summary of Agronomic Practices

Crop yield

2013 Pumping Data & Crop Yield Information

Facility	Field	Crop	Farm : Field - Crop	Acres	Starting PAN	PAN Applied	PAN Remaining	% PAN Applied	Starting PAP	PAP Applied	PAP Remaining	% PAP Applied	K Applied	2013 Actual Yield (ton/acre)	NUP Projected Yield (ton/acre)	% of Projected Yield
8506, 8507, & 8508	01	Wheat	8506, 8507, & 8508 : 01 - Wheat Total	2.02	80.00	25.19	54.81	31.49%		.00	0.00	0.00%	183.76	#N/A	51.2	
8506, 8507, & 8508	01	Corn	8506, 8507, & 8508 : 01 - Corn Total	2.02										77.723	110	70.7%
8506, 8507, & 8508	02	Corn	8506, 8507, & 8508 : 02 - Corn Total	6.57	130.00	26.58	103.42	20.45%		.00	0.00	0.00%	208.01	77.930	105	74.2%
8506, 8507, & 8508	02	Wheat	8506, 8507, & 8508 : 02 - Wheat Total	6.57	74.00	23.44	48.56	34.38%		.00	0.00	0.00%	185.60	#N/A	49.5	
8506, 8507, & 8508	03	Bermuda	8506, 8507, & 8508 : 03 - Bermuda Total	6.48	200.00	198.67	1.33	99.33%		.00	0.00	0.00%	1,474.48	#N/A	3	
8506, 8507, & 8508	04	Wheat	8506, 8507, & 8508 : 04 - Wheat Total	3.08	76.00	62.22	13.78	81.87%		.00	0.00	0.00%	445.79	#N/A	58.4	
8506, 8507, & 8508	04	Corn	8506, 8507, & 8508 : 04 - Corn Total	3.08										77.922	143	54.5%
8506, 8507, & 8508	05	Corn	8506, 8507, & 8508 : 05 - Corn Total	5.74	136.00	34.92	101.08	25.68%		.00	0.00	0.00%	273.25	78.049	142	55.0%
8506, 8507, & 8508	05	Wheat	8506, 8507, & 8508 : 05 - Wheat Total	5.74	77.00	62.22	14.78	80.81%		.00	0.00	0.00%	445.79	#N/A	57.6	
8506, 8507, & 8508	06	Corn	8506, 8507, & 8508 : 06 - Corn Total	6.97	138.00	34.25	103.75	24.82%		.00	0.00	0.00%	266.28	77.905	132	59.0%
8506, 8507, & 8508	06	Wheat	8506, 8507, & 8508 : 06 - Wheat Total	6.97	78.00	75.27	2.73	96.50%		.00	0.00	0.00%	534.84	#N/A	54.5	
8506, 8507, & 8508	07	Corn	8506, 8507, & 8508 : 07 - Corn Total	5.14										78.016	132	59.1%
8506, 8507, & 8508	A-C	Bermuda	8506, 8507, & 8508 : A-C - Bermuda Total	35.22	200.00	158.40	41.60	79.20%		.00	0.00	0.00%	1,195.60	#N/A	30	
8506, 8507, & 8508	D	Corn	8506, 8507, & 8508 : D - Corn Total	17.71	125.00	34.34	90.66	27.47%		.00	0.00	0.00%	254.54	78.035	136	57.4%
8506, 8507, & 8508	D	Wheat	8506, 8507, & 8508 : D - Wheat Total	17.71	78.00	46.85	31.15	60.06%		.00	0.00	0.00%	323.50	38.287	56	68.4%
8506, 8507, & 8508	E	Soybean	8506, 8507, & 8508 : E - Soybean Total	27.87	125.00	68.37	56.63	54.70%		.00	0.00	0.00%	521.66	CF	30	
8506, 8507, & 8508	H1	Wheat	8506, 8507, & 8508 : H1 - Wheat Total	58.25	78.00	18.26	59.74	23.42%		.00	0.00	0.00%	127.46	37.991	56	67.8%
8506, 8507, & 8508	H1	Soybean	8506, 8507, & 8508 : H1 - Soybean Total	58.25	100.00	76.38	23.62	76.38%		.00	0.00	0.00%	572.28	CF	30	
8506, 8507, & 8508	H2	Wheat	8506, 8507, & 8508 : H2 - Wheat Total	9.28	75.00	27.26	47.74	36.34%		.00	0.00	0.00%	190.21	38.254	60	63.8%
8506, 8507, & 8508	H2	Soybean	8506, 8507, & 8508 : H2 - Soybean Total	9.28	120.00	49.88	70.12	41.56%		.00	0.00	0.00%	376.01	CF	30	
8506, 8507, & 8508	H3	Wheat	8506, 8507, & 8508 : H3 - Wheat Total	12.03	76.00	25.09	50.91	33.01%		.00	0.00	0.00%	175.07	37.988	56	67.8%
8506, 8507, & 8508	H3	Soybean	8506, 8507, & 8508 : H3 - Soybean Total	12.03	100.00	74.67	25.33	74.67%		.00	0.00	0.00%	556.46	CF	30	
8506, 8507, & 8508	Sub 4-7	Wheat	8506, 8507, & 8508 : Sub 4-7 - Wheat Total	9.47	49.00	34.19	14.82	69.77%		.00	0.00	0.00%	249.40	37.988	56	67.8%
					2115.00	1158.44	956.56	54.77%	0.00	0.00	0.00	0.00%	8565.97			63.8%

Note: No value in the Starting PAP column indicates that application on that field is N based.
 CF in the 2013 Actual Yield column indicates a crop failure. There were some crops lost to excessive rainfall in 2013.
 A value in the Starting PAP column indicates that application on that field is P based.
 N/A in the 2013 Actual Yield column indicates the crop is actively growing in the field and not yet harvested.

ATTACHMENT 4

DISCHARGE/OUTFALL DESCRIPTION

ATTACHMENT 4
Table I-Discharge Location Descriptions

OUTFALL NUMBER	Est. FLOW	DISCHARGE SOURCE	TREATMENT*	ADDITIONAL BEST MANAGEMENT PRACTICES
001	.006	Production Facility – Farm 6	Secondary Containment	Nutrient Management Plan, Buffers, Setbacks and Conservation Tillage,
002		Production Facility – Farm 6	Secondary Containment	
003	.0063	Production Facility – Farm 8	Secondary Containment	
004		Production Facility – Farm 8	Secondary Containment	
005	.012	Production Facility – Farm 7	Secondary Containment	

.024 MGD estimated total flow from outfalls 001 – 005 -(see calculations next page)

*BMP Description-Secondary Containment: Consists of a grass covered earthen containment structure that collects runoff from the production area. The structure has a manually operated valve that is maintained as normally closed. The BMP is inspected daily by the farm production staff. Once water collects in the structure, it is visually inspected to ensure it does not contain any contaminants and then released.

Farm 6-8 consists of 22,050 swine weighing 55 pounds or over and 9,450 swine weighing under 55 pounds (31,500 total). Approximately 30.6 MG of wastewater is generated at this site annually and 256 acres of land under the control of the applicant are available for land application of this wastewater.

Sanitary wastes from the employees are directed to a separate drain field.

Murphy Brown Dory Farm Stormwater Outfall Flow Calculations

Annual average rainfall (46.62") for the Dory, Va area (Vicksville topo region) is an average of 0.128 inches per day....Converted to feet is **0.0107 feet of rainfall**

Runoff Coefficients of **0.5 for pervious surfaces** and 0.9 for impervious surfaces were obtained from "Design and Construction of Sanitary and Storm Sewers"

Coefficient to convert cu. ft. to MGD is 7.48×10^{-6}

Outfalls **001 & 002** est. 152,856 sq ft pervious surface $\times 0.5 = 76,428$ sq. ft.

No impervious service Total Area = 76,428 sq. ft.

Total Runoff Volume $0.0107 \text{ ft rain} \times 76,428 = 817.78 \text{ cu ft.} \times 7.48 \times 10^{-6} = \mathbf{0.006 \text{ MGD}}$

Outfalls **003 & 004** est. 160,036 sq ft pervious surface $\times 0.5 = 80,018$ sq. ft.

No impervious service Total Area = 80,018 sq. ft.

Total Runoff Volume $0.0107 \text{ ft rain} \times 80,018 = 856.19 \text{ cu ft.} \times 7.48 \times 10^{-6} = \mathbf{0.0063 \text{ MGD}}$

Outfalls **005** est. 303,493 sq ft pervious surface $\times 0.5 = 151,746$ sq. ft.

No impervious service Total Area = 151,746 sq. ft.

Total Runoff Volume $0.0107 \text{ ft rain} \times 151,746 = 1,623.7 \text{ cu ft.} \times 7.48 \times 10^{-6} = \mathbf{0.012 \text{ MGD}}$

Estimated Total Storm water flow from all Dory Farm outfalls is 0.024 MGD

ATTACHMENT 5

TABLE II - EFFLUENT MONITORING/LIMITATIONS

TABLE II - INDUSTRIAL (CAFO) WASTE LIMITATIONS/MONITORING

Outfall Description:
SIC CODE: 0213

(X) Final Limits () Interim Limits Effective Dates - From: Issuance To: Expiration

WASTE MONITORING [a]

PARAMETERS	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
Total Kjeldahl Nitrogen	NL	*	2/year	Composite
Ammonia Nitrogen	NL	*	2/year	Composite
Total Phosphorus	NL	*	2/year	Composite
Total Potassium	NL	*	2/year	Composite
Calcium	NL	*	2/year	Composite
Magnesium	NL	*	2/year	Composite
Moisture Content	NL	%	2/year	Composite
Notes: NL = No limit, this is a monitoring requirement only. * Parameters for waste may be reported as a percent, as lbs/ton or lbs/1000 gallons, or as ppm where appropriate.				

2/Year = Between January 1 - June 30 and between July 1-December 31.

[a] Analysis of waste shall be according to methods specified in the facility's approved Nutrient Management Plan or alternative procedures outlined in the Farm Operating Manual for Schedule of Compliance. No monitoring or reporting required until after completion of the schedule.

ATTACHMENT
DEPARTMENT OF ENVIRONMENTAL QUALITY
VPDES Monitoring Report

Facility Name: Murphy Brown LLC Farms 6-8
Address: 27409 Berlindory Road
Wakefield, VA 23888

VPDES Permit No.: VA0C50002

Report Period: From / / To / /

Monitoring Station: CAFO Waste Monitoring

Parameters	Units		Monitoring Results		Analysis Frequency	Sample Type
			Average	Maximum		
TKN	*	Reported	NL	NL	2/Year	Composite
Ammonia-Nitrogen	*	Required				
		Reported				
		Required	NL	NL	2/Year	Composite
Total Phosphorus	*	Reported				
		Required	NL	NL	2/Year	Composite
Total Potassium	*	Reported				
		Required	NL	NL	2/Year	Composite
Calcium	*	Reported				
		Required	NL	NL	2/Year	Composite
Magnesium	*	Reported				
		Required	NL	NL	2/Year	Composite
Moisture Content	%	Reported				
		Required	NL	NL	2/Year	Composite

Name of Principal Exec. Officer or Authorized Agent / Title

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Sec 18 U.S.C. § 1001 and 33 U.S.C. § 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

Signature of Principal Officer or Authorized Agent / Date

TABLE II - INDUSTRIAL (CAFO) LIMITATIONS/MONITORING

Outfall Description:
SIC CODE: 0213

(X) Final Limits () Interim Limits Effective Dates - From: Issuance To: Expiration

SOILS MONITORING

PARAMETER	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency**	Sample Type
pH	NL	SU	1/3 years	Composite *
Phosphorus	NL	ppm or lbs/ac	1/3 years	Composite *
Potassium	NL	ppm or lbs/ac	1/3 years	Composite *
Calcium	NL	ppm or lbs/ac	1/3 years	Composite *
Magnesium	NL	ppm or lbs/ac	1/3 years	Composite *
Notes: NL = No limit, this is a monitoring requirement only. SU = Standard Units * Specific sampling requirements are found in the facility's approved Nutrient Management Plan.				

1/3Years = Between January 1 and December 31.

[a] Soil monitoring shall be conducted at a depth of between 0-6 inches, unless otherwise specified in the facility's approved Nutrient Management Plan.

[b] Analysis of soil shall be according to methods specified in the facility's approved Nutrient Management Plan.

ATTACHMENT
DEPARTMENT OF ENVIRONMENTAL QUALITY
VPDES Monitoring Report

Facility Name: Murphy Brown LLC Farms 6-8
Address: 27409 Berlindory Road
Wakefield, VA 23888

VPA Permit No.: VA0C50002

Report Period: From / / To / /

Monitoring Station: Soils Monitoring -Land Application Site

Parameters	Units		Monitoring Results		Frequency of Analysis	Sample Type
			Average	Maximum		
Soil pH	SU	Reported				
		Required	NL (min)	NL	1/3 Years	Composite
Phosphorus	ppm or lbs/ac	Reported				
		Required	*****	NL	1/3 Years	Composite
Potassium	ppm or lbs/ac	Reported				
		Required	*****	NL	1/3 Years	Composite
Calcium	ppm or lbs/ac	Reported				
		Required	*****	NL	1/3 Years	Composite
Magnesium	ppm or lbs/ac	Reported				
		Required	*****	NL	1/3 Years	Composite

Name of Principal Exec. Officer or Authorized Agent / Title

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Signature of Principal Officer or Authorized Agent / Date

TABLE II - INDUSTRIAL (CAFO) LIMITATIONS/MONITORING

GW Well #:

SIC CODE: 0213

(X) Final Limits () Interim Limits Effective Dates - From: Issuance To: Expiration

GROUNDWATER MONITORING

PARAMETER	LIMITATIONS	UNITS	MONITORING REQUIREMENTS[c]	
			Frequency[a]	Sample Type
Static Water Level	NL	.01 ft	2/year *	Measured
Temperature	NL	°C/°F	2/year *	Grab[b]
Turbidity	NL	NTU	2/year *	Grab
Ammonia Nitrogen	NL	mg/l	2/year *	Grab
Nitrate Nitrogen	NL	mg/L	2/year *	Grab
pH	NL	SU	2/year *	Grab
Conductivity	NL	umhos/cm	2/year *	Grab

Note: NL = No limit, this is a monitoring requirement only.

* see Part I.B.4.b.(4) above for new well monitoring frequency

Prior to sampling, wells shall be purged by either allowing a minimum of 3 well volumes to be removed or until well purging parameters (pH, temperature and conductivity) stabilize to plus or minus 10%.

2/Year = Between January 1 - June 30 and between July 1-December 31

[a] See Part I.B.4.b.(4) for additional instructions regarding ground water monitoring frequencies.

[b] Grab samples - An individual sample should be taken after three (3) well volumes of groundwater are removed (allowing the well to recharge between each well volume removed) or until well purging parameters (i.e. pH, temperature, and specific conductance) stabilize to + 10%. The bailer or hose used should not contaminate samples.

[c] data shall be analyzed and used to compare to an action level identified in the Groundwater Monitoring Plan which will trigger an established response from the Permittee to begin remedial action. Remedial action shall include, but not be limited to, 1) locating the source of the contamination; 2) eliminating the source or restricting the extent of the source; and 3) devising a sampling program to document the effectiveness of the remedial action to include repeating source discrimination geochemistry on the affected monitoring well(s). The remedial action shall be initiated within the next calendar quarter after data analysis has identified the need for remedial action

ATTACHMENT
DEPARTMENT OF ENVIRONMENTAL QUALITY
VPDES Monitoring Report

Facility Name: Murphy Brown LLC Farms 6-8
Address: 27409 Berlindory Road
Wakefield, VA 23888
VPA Permit No.: VA0C50002

Report Period: From / / To / /

Monitoring Station: Ground Water Monitoring - Well No. _____

Parameters	Units		Monitoring Results		Frequency of Analysis	Sample Type
			Average	Maximum		
Static Water Level	0.01 ft	Reported				
		Required	*****	NL	2/year	Measured
Temperature	°C/°F	Reported				
		Required	*****	NL	2/year	Grab
Turbidity	NTU	Reported				
		Required	*****	NL	2/year	Grab
Ammonia-Nitrogen	mg/l	Reported				
		Required	*****	NL	2/year	Grab
Nitrate-Nitrogen	mg/l	Reported				
		Required	*****	NL	2/year	Grab
pH	Std units	Reported				
		Required	*****	NL	2/year	Grab
Conductivity	umhos/cm	Reported				
		Required	*****	NL	2/year	Grab

Name of Principal Exec. Officer or Authorized Agent / Title

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. § 1001 and 33 U.S.C. § 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

Signature of Principal Officer or Authorized Agent / Date

TABLE II - STORM WATER EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 001-005

Outfall Description: see below

SIC CODE: 0213

NOTE: These outfalls represent storm event monitoring for non-process outfalls.

STORM WATER DISCHARGE MONITORING

FEATURES TO BE MONITORED IN THE PRODUCTION AREA					MONITORING REQUIREMENTS	
					Frequency *	Sample Type
Discharge points:					Quarterly	Grab
001	36°51'23.47" N	77°02'23.27"W	UT to Indigo Branch	Farm 61 Production Fac		
002	36°51'20.45" N	77°02'08.62"W	UT to Indigo Branch	Farm 6 Production Fac		
003	36°51'47.91" N	77°02'29.07"W	UT to Horsepen Branch	Farm 8 Production Fac		
004	36°51'54.06" N	77°02'17.51"W	UT to Horsepen Branch	Farm 8 Production Fac		
005	36°52'00.55" N	77°01'55.59"W	UT to Horsepen Branch	Farm 7 Production Fac		
•						
Notes: * The visual inspection shall be made during daylight hours (e.g., normal working hours). ** No analytical tests are required to be performed on the samples. *** Surface waters as defined in Attachment 12-Definition of Terms.						

[a]Quarterly = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

PERMITTEE NAME/ADDRESS(INCLUDE
FACILITY NAME/LOCATION IF DIFFERENT)

NAME Murphy Brown Farm - 6 thru 8 - Berlindory Rd
ADDRESS PO Box 1240
Waverly VA 23890

FACILITY LOCATION 27409 Berlindory Rd, Wakefield, VA 23888

Industrial Minor 05/19/2014

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)

Tidewater Regional Office
5636 Southern Boulevard

Virginia Beach VA 23462

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS
BEFORE COMPLETING THIS FORM.

VAOC50002		001	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
YEAR	MO	DAY	TO

FROM

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	
001 FLOW	*****			*****	*****	*****		
	*****	NL	MG	*****	*****	*****	4/YR	EST
REPORTD								
REQRMNT							*****	
REPORTD								
REQRMNT							*****	
REPORTD								
REQRMNT							*****	
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REQRMNT							*****	
REPORTD								
REQRMNT							*****	
REPORTD								
REQRMNT							*****	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
Visual Observations of Grab:

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN RESPONSIBLE CHARGE			DATE					
				TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY			
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THIS INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.				PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE							
				TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY			

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

PERMITTEE NAME/ADDRESS(INCLUDE
FACILITY NAME/LOCATION IF DIFFERENT)

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ADDRESS PO Box 1240
Waverly VA 23890

FACILITY LOCATION 27409 Berlindory Rd, Wakefield, VA 23888

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5636 Southern Boulevard

Virginia Beach VA 23462

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VA0C50002		002	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
YEAR	MO	DAY	TO

FROM

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	
001 FLOW	*****			*****	*****			
	*****	NL	MG	*****	*****		4/YR	EST
REPORTD								
REQRMNT							*****	
REPORTD								
REQRMNT							*****	
REPORTD								
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REQRMNT							*****	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
Visual Observations of Grab:

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BODS(K.G.)	OPERATOR IN RESPONSIBLE CHARGE			DATE				
				TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO. DAY			
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.				PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE						
				TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO. DAY			

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5636 Southern Boulevard

Virginia Beach VA 23462

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VA0C50002		003	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
YEAR	MO	DAY	TO

NAME Murphy Brown Farm - 6 thru 8 - Berlindory Rd
ADDRESS PO Box 1240 Waverly VA 23890
FACILITY LOCATION 27409 Berlindory Rd, Wakefield, VA 23888

FROM

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
001 FLOW	*****			*****	*****	*****			
REPORTD	*****			*****	*****	*****			
REQRMNT	*****	NL	MG	*****	*****	*****		4/YR	EST
REPORTD									
REQRMNT								*****	
REPORTD									
REQRMNT								*****	
REPORTD									
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REPORTD									
REQRMNT								*****	
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REQRMNT								*****	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
Visual Observations of Grab:

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN RESPONSIBLE CHARGE			DATE					
				TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY			
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				TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY			

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Industrial Minor 05/19/2014

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(REGIONAL OFFICE)

Tidewater Regional Office
5636 Southern Boulevard

Virginia Beach VA 23462

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS
BEFORE COMPLETING THIS FORM.

PERMITTEE NAME/ADDRESS(INCLUDE
FACILITY NAME/LOCATION IF DIFFERENT)

NAME Murphy Brown Farm - 6 thru 8 - Berlindory Rd
ADDRESS PO Box 1240
Waverly VA 23890

FACILITY LOCATION 27409 Berlindory Rd, Wakefield, VA 23888

VAOC50002		004	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
YEAR	MO	DAY	TO

FROM

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	
001 FLOW	REPORTD	*****		*****	*****	*****		
	REQRMNT	*****	MG	*****	*****	*****	4/YR	EST
REPORTD	REPORTD							
	REQRMNT						*****	
REPORTD	REPORTD							
	REQRMNT						*****	
REPORTD	REPORTD							
	REQRMNT						*****	
REPORTD	REPORTD							
	REQRMNT						*****	
REPORTD	REPORTD							
	REQRMNT						*****	
REPORTD	REPORTD							
	REQRMNT						*****	
REPORTD	REPORTD							
	REQRMNT						*****	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
Visual Observations of Grab:

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)		TOTAL BOD5(K.G.)		OPERATOR IN RESPONSIBLE CHARGE			DATE			
						TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY	
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						TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY	

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Industrial Minor 05/19/2014
DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462

VA0C50002		005	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
YEAR	MO	DAY	TO

NAME Murphy Brown Farm - 6 thru 8 - Berlindory Rd
ADDRESS PO Box 1240 Waverly VA 23890
FACILITY LOCATION 27409 Berlindory Rd, Wakefield, VA 23888

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS
BEFORE COMPLETING THIS FORM.

FROM

PARAMETER	QUANTITY OR LOADING		QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	UNITS		
001 FLOW	*****			*****	*****			
	*****	NL	MG	*****	*****		4/YR	EST
REPORTD								
REQRMNT							*****	
REPORTD								
REQRMNT							*****	
REPORTD								
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ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
Visual Observations of Grab:

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN RESPONSIBLE CHARGE		DATE				
				TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR MO. DAY			
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.				PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE					
				TYPED OR PRINTED NAME	SIGNATURE		YEAR MO. DAY			

ATTACHMENT 6

SPECIAL CONDITIONS RATIONALE

54

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE
ATTACHMENT 6

Special Conditions:

Waste Storage: The permittee is required to properly construct and operate the waste storage facilities.

Part II A	1	Design and Operation	Rationale: Required by § 62.1-44.17:1.E1 and 9VAC25-192-70
	2	New Storage	Rationale: Required by § 62.1-44.17:1.E6 and 9VAC25-192-70
	3	Earthen liquid waste storage	Rationale: Required by § 62.1-44.17:1.E5 and 9VAC25-192-70

Operation and Maintenance: The permittee is required to properly operate and maintain the facility.

Part II B	1	Production Area Operation	Rationale: Required by 9VAC25-31-200 E 1 c
	2	Chemical and other contaminant handling	Rationale: Required by 9VAC25-31-200 E 1 e
	3	Confined Animals	Rationale: Required by 9VAC25-31-200 E 1 d
	4	Liquid waste level	Rationale: Required by 9VAC25-192-70
	5	Freeboard	Rationale: Required by 9VAC25-192-70
	6	Depth marker	Rationale: Required by 9VAC25-31-30 (40CFR412 §412.47 (a) (2))
	7	Mortality disposal	Rationale: Required by 9VAC25-31-200 E 1 b and 40CFR412 (§412.47 (a) (4))

Special Conditions:

Part II C	1	Water Quality Standards Reopener	Rationale: The VPDES Permit Regulation, 9 VAC 25-31-220 D requires effluent limitations to be established which will contribute to the attainment or maintenance of water quality criteria.
	2	Nutrient Enriched Waters Reopene	Rationale: The Policy for Nutrient Enriched Waters, 9 VAC 25-40 -10 allows reopening of permits for discharges into waters designated as nutrient enriched if total phosphorus and total nitrogen in a discharge potentially exceed specified concentrations. The policy also anticipates that future total phosphorus and total nitrogen limits may be needed.
	3	Total Maximum Daily Load (TMDL) Reopener	Rationale: For specified waters, Section 303(d) of the Clean Water Act requires the development of total maximum daily loads necessary to achieve the applicable water quality standards. The TMDL must take into account seasonal variations and a margin of safety. In addition, Section 62.1-44.19:7 of the State Water Control Law requires the development and implementation of plans to address impaired waters, including TMDLs. This condition allows for the permit to be either modified or, alternatively, revoked and reissued to incorporate the requirements of a TMDL once it is developed. In addition, the reopener recognizes that, in according to Section 402(o) (1) of the Clean

Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan or other wasteload allocation prepared under Section 303 of the Act.

- | | | |
|---|--------------------------------|--|
| 4 | Farm Operating Manual | The permittee will develop and submit a farm operating manual.
Rationale: Required by Code of Virginia § 62.1-44.16; VPDES Permit Regulation, 9VAC25-31-190 E, and 40 CFR 122.41(e). These require proper operation and maintenance of the permitted facility. Compliance with an approved O&M manual ensures this. 40CFR412 (\$412.47) |
| 5 | Changes to the facility | Rationale: Required by: 9VAC25-31-200 E |
| 6 | Notification Prior to Use | Rationale: Required by: § 62.1-44.17:1 E 9 and 9VAC25-192-70 |
| 7 | Materials Handling and Storage | Rationale: Required by: |
| 8 | Storage Closure | Rationale: Required by: 9VAC25-192-70 |
| 9 | Training Requirement | Rationale: Required by: § 62.1-44.17:1 E 10 and 9VAC25-192-70 |

Nutrient Management Requirements: The permittee is required to develop and implement a site specific nutrient management plan.

- | | | | |
|------------|---|--|--|
| Part III A | 1 | Nutrient Management plan requirements and elements | Rationale: Required by: § 62.1-44.17:1 E 2 and 9VAC25-31-200 E 1 |
| | 2 | Waste Application | Rationale: Required by: 9VAC25-630-50 Part I B 4 e |
| | 3 | Manure Transfer requirements | Rationale: Required by: 9VAC25-31-200 E 3 |

Land Application Requirements: The permittee is required to meet the land application requirements related to buffer zones. Additionally the installation of best management practices.

- | | | | |
|------------|-----|--|--|
| Part III B | 1 | Buffer Zones | Rationale: Required by: § 62.1-44.17:1 E 3 and 9VAC25-31- |
| | 2 | Best Management Practices | Rationale: Required by: 9VAC25-31-200 E 1 f |
| Part IV | A-Z | Conditions Applicable to All VPDES Permits | Rationale: Required by: VPDES Permit Regulation, 9VAC25-31-190 requires all VPDES permits to contain or specifically cite the conditions listed. |

ATTACHMENT 7

RECEIVING WATERS INFO./
TIER DETERMINATION/STORET DATA/
STREAM MODELING/303(d) LISTED SEGMENTS

Planning Permit Review

57

Date: 4/18/2014

To: Kristie Britt, TRO

Permit Writer: RE Smithson

Facility: Murphy Brown, LLC Farms 6-8 (Dory Farm)

Permit Number: previously VPA01075 convert to VPDES CAFO Permit

Issuance, Reissuance or Modification (if Modification describe): Issuance

Permit Expiration Date: N/A

Waterbody ID (ex: VAT-G15E): K35R

Topo Name: Vicksville 38D & Manry 38ATopo

Facility Address: 27409 Berlindory Rd., Wakefield VA 23888

Receiving Stream: Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

Stream Name: UT to Indigo Branch	
Stream Data Requested?	
Outfall #: 001	Lat Lon: 36 51'23.47"N 77 02'.23.27" W
Outfall #: 002	Lat Lon: 36 51'20.45" N 77 02'08.62" W
Outfall #:	Lat Lon:
Stream Name (2): UT to Horsepen Branch	
Stream Data Requested?	
Outfall #: 003	Lat Lon: 36 51'47.91" N 77 02'29.07" W
Outfall #: 004	Lat Lon: 36 51'54.06" N 77 02'17.51" W
Outfall #: 005	Lat Lon: 36 52'00.55" N 77 01'55.59" W

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

Planning Review:

303 (d): Indicate Outfalls which discharge directly to an impaired (Category 5) stream segment and parameters impaired	
All outfalls discharge to impaired water VAT-K35R_ZZZ01A00. This segment is impaired for mercury based on VDH Fish Consumption Advisory for the Blackwater and its tributaries.	
Tier Determination	
Tier	Outfall 001-005 discharge to intermittent streams. Therefore these waters are a Tier 1. See Attachment 1.
Tier	
Management Plan	
Is the facility Referenced in a Management Plan?	NO
Are limits contained in a Management Plan?	NO

Review will be completed in 30 days of receipt of request.

Additional Comments:

The UT to Indigo and Horsepen are Class VII waters which are included in the Assessment Unit VAT-K35R_ZZZ01A00.
KNB 5/2/2014

Until further guidance is provided by OWRM Permits, assessment of waters for NH_3 should be based upon OWRM Guidance No. 93-015 from Larry G. Lawson, dated June 22, 1993.

The above guidance specifies that the ambient NH_3 data should be compared to the NH_3 standard (calculated using 90th percentile of ambient data for pH and temperature of that segment) and by using the "STANDARDS.EXE Program" developed by OWRM Permits Modelling. (These environmental conditions are considered critical design conditions to protect water quality and to comply with WQS.) If the 97th percentile of the in-stream data is greater than either of the calculated NH_3 standards (chronic or acute), then OWRM considers the standard is being violated and the segment is WQL.

2.4.7 Wasteload Allocations Where The 7Q10 Is Zero Or Minimal

A discharge to a water course with a 7Q10 of zero or near zero would be required to have effluent limits that would comply with water quality standards, at a minimum. The discharge would have to be "self sustaining" so to comply with water quality standards. Therefore, the discharge would be WQL and the receiving water course with a 7Q10 of zero near zero would be considered a tier 1 segment.

Dry-ditch
* = Tier 1

A discharge to a tier 1 water that empties into a tier 2 water would have to be evaluated for antidegradation at the point of confluence of the two water courses, if the discharge is in close enough proximity to impact the tier 2 water. In the above scenario, antidegradation requirements to protect tier 2 waters may apply to a discharge to a tier 1 water. Therefore, effluent limits may be more stringent than required by the numerical water quality standards.

If a discharge occurs to a dry ditch or tributary that empties into a free flowing stream and the distance from the discharge to the next confluence is too short to model (based upon the current modelling programs), then the discharge should be modelled as if it occurs directly to the free flowing stream.

2.4.8 Estuaries - Wasteload Allocations & TMDL Development

Similar to freshwater streams, water quality wasteload allocations (WQWLAs) and TMDLs in all tidal influenced waters will be expressed as a mass limitation for the conventional parameters (BOD_5 , cBOD_5 , TKN, and NH_3) and as a concentration for toxics.

Tidal freshwater segments and transition zone segments identified

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION
OFFICE OF WATER RESOURCE MANAGEMENT

(SECOND DRAFT)
GUIDANCE MANUAL

FOR THE
VIRGINIA WATER QUALITY MANAGEMENT PLAN

March 4, 1994

Attachment 1-2

TMDL Permit Review

60

Date: 4/22/2014

To: Jennifer Howell, TRO

✓ JSH 05/14/2014

Permit Writer: RE Smithson

Facility: Murphy Brown Farms 6-8 (Dory Farm), Wakefield VA.

Permit Number: previously VPA01075 convert to VPDES CAFO Permit

Issuance, Reissuance or Modification (if Modification describe) : Issuance

Permit Expiration Date: N/A

Waterbody ID (ex: VAT-G15E): [Click here to enter text.](#)

Topo Name: Vicksville 38D and Manry 38A

Facility Address:

27409 Berlindory Rd., Wakefield VA 23888

Receiving Stream: Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

Stream Name: UT to Indigo Branch	
Click here to enter text.	
Outfall #: 001	Lat Lon: 36 51'23.47"N 77 02'.23.27" W
Outfall #: 002	Lat Lon: 36 51'20.45" N 77 02'08.62" W
Outfall #: Click here to enter text.	Lat Lon: Click here to enter text.
Stream Name (2): UT to Horsepen Branch	
Click here to enter text.	
Outfall #: 003	Lat Lon: 36 51'47.91" N 77 02'29.07" W
Outfall #: 004	Lat Lon: 36 51'54.06" N 77 02'17.51" W
Outfall #: 005	Lat Lon: 36 52'00.55" N 77 01'55.59" W

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

Is there a design flow change? If yes give the change. [Click here to enter text.](#)

TMDL Review:

Is a TMDL IN PROGRESS for the receiving stream? No	
Has a TMDL been APPROVED that includes the receiving stream?	
No, an assessment report was developed because the impairments are caused by natural conditions.(see additional comments)	
If yes, Include TMDL Name, Pollutant(s) and date of approval:	
Dissolved Oxygen Assessment for Blackwater Swamp Waters. EPA Approved 4/8/2010	
Is the facility assigned a WLA from the TMDL?	No
If Yes, what is the WLA?	
NA	

Review will be completed in 30 days of receipt of request.

Additional Comments:

This is page 1 of 1. Note: Maps and outfall locations to be provided in a separate package

**** EPA approved DEQ's determination that low dissolved oxygen levels were naturally occurring and not due to anthropogenic inputs. Therefore, a TMDL was not developed. The river segments are currently in triennial review to**

TMDL Permit Review

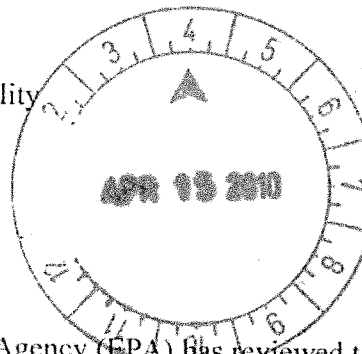
61

be included as Class VII Swamp Waters. The outfalls in this permit are within this watershed. Because this is a new VPDES permit within the watershed, every effort should be made to maintain the reduced anthropogenic input and be very well controlled so they do not impact the dissolved oxygen levels. (See "TMDL Attachment 1")



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Ellen Gilinsky, Ph.D., Director
Division of Water Quality Programs
Virginia Department of Environmental Quality
629 E. Main Street
P.O. Box 1105
Richmond, Virginia 23218



Dear Dr. Gilinsky:

The U.S. Environmental Protection Agency (EPA) has reviewed the Virginia Department of Environmental Quality's (VADEQ) *Dissolved Oxygen (DO) Assessment for Blackwater Swamp Waters*, which addresses six Consent Decree segments currently listed as impaired for dissolved oxygen on Virginia's 2008 Section 305(b)/303(d) Integrated Report.¹ VADEQ performed this assessment to confirm that all six segments (Blackwater River (Upper), Blackwater River (Middle, Lower-Middle, Lower, Mouth), Mill Swamp, Rattlesnake Swamp, Upper Seacock Swamp and Tarrara Creek) are impaired due to natural conditions and do not require the development of a Total Maximum Daily Load (TMDL). VADEQ is therefore requesting that these segments be placed in Category 4C of Virginia's 2010 Section 305(b)/303(d) Integrated Report.

As indicated in your assessment, Blackwater River (Upper), Mill Swamp, Rattlesnake Swamp, Upper Seacock Swamp, and Tarrara Creek are currently classified as Class VII Swamp Waters in Virginia's Water Quality Standards. The Class VII designation applies to naturally occurring swamp waters with dissolved oxygen values that may exceed the criteria required for Class I through VI waters. There are no numeric dissolved oxygen criteria for Class VII waters because dissolved oxygen exceedances are a result of natural conditions and are not due to anthropogenic activities. Dissolved oxygen TMDLs are, therefore, not required for Class VII waters. Based upon this information, EPA approves your request to place Blackwater River (Upper), Mill Swamp, Rattlesnake Swamp, Upper Seacock Swamp, and Tarrara Creek in Category 4C of Virginia's 2010 Section 305(b)/303(d) Integrated Report.

Blackwater River (Middle, Lower-Middle, Lower, Mouth) is the only segment in the assessment that is currently classified as a Class II Estuarine Water in Virginia's Water Quality Standards. The dissolved oxygen criteria for Class II waters require a minimum concentration of 4.0 mg/l and a daily average concentration of 5.0 mg/l. VADEQ's, *Procedure for Natural Condition Assessment of low pH and low DO in Virginia Streams: October 2004*, was used to determine whether the dissolved oxygen impairments in the Blackwater River (Middle, Lower-Middle, Lower, Mouth) are being caused by naturally occurring conditions or by anthropogenic

¹ A complete listing history of the impaired segments addressed in this assessment is enclosed.

activities. To make this determination, Virginia's analysis of the dissolved oxygen impairment was conducted using the following procedure:

Step 1. Determine if wetlands are present through appearance and slope/flow measures.
Appearance and slope/flow must be identified for each stream segment to be assessed for potential re-classification. Streams that have naturally low dissolved oxygen levels are characterized by decaying vegetation, low slopes and low velocity flows.

Findings: The assessment of Blackwater River (Middle, Lower-Middle, Lower, Mouth) revealed swampy water conditions characterized by very low slopes (<0.01%) and low velocity flows. Water in the segment also had a distinctive color (>50 PT Color, resembling dark tea) that is indicative of swamp conditions. This coloration is common in swamps and wetlands and is caused by the decomposition of plant material that produces fulvic and humic acids.

Step 2. Determine nutrient levels and compare with U.S. Geological Survey (USGS) background concentrations.

High nutrient levels are an indication of anthropogenic inputs of nitrogen, phosphorus, and possibly organic matter. Streams with average concentrations of nutrients greater than the national background concentrations (USGS 1999) should be evaluated for potential impacts from anthropogenic sources.

Findings: Mean nutrient concentrations for two of the three nutrients that were monitored - total nitrogen (TN) and total phosphorus (TP) - were slightly above the USGS national average background concentrations. Average TN concentrations exceeded the USGS screening values at four of 16 monitoring stations, while average TP exceeded the screening values at one of 16 stations. That said, further evaluation determined that elevated nutrient levels are not having an impact on dissolved oxygen levels in the Blackwater River (Middle, Lower-Middle, Lower, Mouth), as explained in Step 4.

Step 3. Determine degree of seasonal fluctuation of dissolved oxygen levels.

A weak seasonal pattern could indicate that human inputs from point or nonpoint sources are impacting the seasonal cycle of dissolved oxygen. A seasonal analysis must be conducted to verify a consistent seasonal pattern for dissolved oxygen levels.

Findings: Dissolved oxygen was assessed for seasonal fluctuations using a Mood's median test. The results indicated that dissolved oxygen shows consistent seasonality.

Step 4. Determine anthropogenic impacts such as permitted dischargers.

Every effort should be made to identify human impacts that could exacerbate low dissolved oxygen levels. Point sources should be identified and Discharge Monitoring Report data analyzed to determine if there is any impact made to the streams dissolved oxygen concentrations.

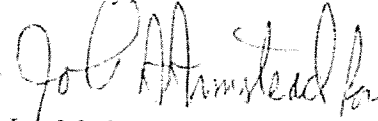
Findings: There are two point sources discharging nutrients into the Blackwater River (Middle, Lower-Middle, Lower, Mouth), including the City of Franklin Wastewater Treatment Plant - VA0023922, and International Paper - VA0004162. Data from these facilities show that they are very well controlled and are not impacting dissolved oxygen

levels in the Blackwater River (Middle, Lower-Middle, Lower, Mouth). Dissolved oxygen concentrations measured at 16 monitoring stations throughout the segment remain consistent; showing no change at or below the permitted discharge points, where the impact from anthropogenic sources would most likely be found. DEQ also noted that the International Paper Mill is scheduled to shut down in April 2010, which will result in substantial reductions in nutrient loading to the river. In addition, excess organic matter was shown not to be excessive due to the fact that five-day biochemical oxygen demand concentrations were well below the maximum concentration criteria of 4.0mg/L at all monitoring stations. Based upon these results, there is no indication that anthropogenic activities are exacerbating the naturally low dissolved oxygen levels in the Blackwater River (Middle, Lower-Middle, Lower, Mouth).

Upon review of VADEQ's *Dissolved Oxygen (DO) Assessment for Blackwater Swamp Waters*, EPA approves VADEQ's request to place the dissolved oxygen impairments in all six Consent Decree segments under Category 4C of Virginia's 2010 Section 305(b)/303(d) Integrated Report. VADEQ has demonstrated that the dissolved oxygen impairments are occurring naturally, and do not warrant the development of a TMDL. In addition, it is EPA's understanding that VADEQ will request that Blackwater River (Middle, Lower-Middle, Lower, Mouth) be formally reclassified as a Class VII Swamp Water during the next triennial review of Virginia's Water Quality Standards.

If you have any questions or comments please call me, or have your staff contact Greg Voigt, at 215-814-5737.

Sincerely,


Jon M. Capacasa, Director
Water Protection Division

Enclosure

cc: David Lazarus, VADEQ

Dissolved Oxygen Assessment for Blackwater Swamp Waters
Section 305(b)(303(d) Listing History

Water Body	Assessment	Parameter	Consent Decree ID	Water Body ID	Water Body ID	Water Body ID	Water Body ID	Water Body ID
Blackwater River (upper)	No TMDL Class VII Swamp Water Move to Category 4C	Dissolved Oxygen	VAT-K33R*	VAT-K33R	VAT-K33R-02	01551	K32R-13-DO	VAT-K33R_B LW01A00 VAT-K33R_B LW02A04 VAT-K33R_B LW03A08
Blackwater River (middle, lower, mouth)	No TMDL Class II Estuarine Water Move to Category 4C	Dissolved Oxygen	VAT-K36R*	VAT-K36R	VAT-K36R-01	00639	K32R-13-DO	VAT-K36R_B LW02A08 VAT-K36R_B LW03A08 VAT-K36R_B LW06A08 VAT-K36R_B LW04A08 VAT-K36R_B LW05A08 VAT-K36R_WAC01A08
Mill Swamp	No TMDL Class VII Swamp Water Move to Category 4C	Dissolved Oxygen	VAT-K34R*	VAT-K34R	VAT-K34R-01	00636	K34R-01-DO	VAT-K34R_MSW01A00
Rattlesnake Swamp	No TMDL Class VII Swamp Water Move to Category 4C	Dissolved Oxygen	VAT-K34R*	VAT-K34R	VAT-K34R-02	00637	K34R-02-DO	VAT-K34R_RKN01A02
Upper Seacock Swamp	No TMDL Class VII Swamp Water Move to Category 4C	Dissolved Oxygen	VAT-K35R*	VAT-K35R	VAT-K35R-01	00638	K35R-01-DO	VAT-K35R_SCK01A00
Tarrara Creek	No TMDL Class VII Swamp Water Move to Category 4C	Dissolved Oxygen	VAT-K13R*	VAT-K13R	VAT-K13R-01	00634	K13R-01-DO	VAT-K13R_TRR01A00

*Consent Decree ID

ATTACHMENT 8

TABLE III (a) AND TABLE III (b) -
CHANGE SHEETS

TABLE III (a)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

N/A - Issuance

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

TABLE III (b)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the changes).

N/A

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001					

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 9

NPDES INDUSTRIAL PERMIT RATING
WORKSHEET

NPDES PERMIT RATING WORK SHEET

70

VPDES NO. : VA0C50002

<input type="checkbox"/>	Regular Addition
<input checked="" type="checkbox"/>	Ratings Confirmation
<input type="checkbox"/>	Score change, but no status Change
<input type="checkbox"/>	Deletion

Facility Name: Murphy Brown LLC-Berlindory Rd- Dory Farm 6-8

City / County: Wakefield/ Southampton County

Receiving Water: UT, Indigo Branch; UT, Horsepen Branch

Reach Number: _____

Is this facility a steam electric power plant (sic =4911) with one or more of the following characteristics?

1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power Plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rate

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

☐ YES; score is 700 (stop here)

☒ NO; (continue)

☐ Yes; score is 600 (stop here) ☒ NO; (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: _____ Primary Sic Code: 02131 Other Sic Codes: _____
 Industrial Subcategory Code: 000 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input checked="" type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	15	<input type="checkbox"/> 7.	7	35
<input type="checkbox"/> 1.	1	5	<input type="checkbox"/> 4.	4	20	<input type="checkbox"/> 8.	8	40
<input type="checkbox"/> 2.	2	10	<input type="checkbox"/> 5.	5	25	<input type="checkbox"/> 9.	9	45
			<input type="checkbox"/> 6.	6	30	<input type="checkbox"/> 10.	10	50

Code Number Checked: 0

Total Points Factor 1: 0

FACTOR 2: Flow/Stream Flow Volume (Complete either Section A or Section B; check only one)

Section A – Wastewater Flow Only considered

Wastewater Type (see Instructions)	Code	Points
Type I: Flow < 5 MGD	<input type="checkbox"/> 11	0
Flow 5 to 10 MGD	<input type="checkbox"/> 12	10
Flow > 10 to 50 MGD	<input type="checkbox"/> 13	20
Flow > 50 MGD	<input type="checkbox"/> 14	30
Type II: Flow < 1 MGD	<input type="checkbox"/> 21	10
Flow 1 to 5 MGD	<input type="checkbox"/> 22	20
Flow > 5 to 10 MGD	<input type="checkbox"/> 23	30
Flow > 10 MGD	<input type="checkbox"/> 24	50
Type III: Flow < 1 MGD	<input type="checkbox"/> 31	0
Flow 1 to 5 MGD	<input checked="" type="checkbox"/> 32	10
Flow > 5 to 10 MGD	<input type="checkbox"/> 33	20
Flow > 10 MGD	<input type="checkbox"/> 34	30

Section B – Wastewater and Stream Flow Considered

Wastewater Type (see Instructions)	Percent of Instream Wastewater Concentration at Receiving Stream Low Flow	Code	Points
Type I/III:	< 10 %	<input type="checkbox"/> 41	0
	10 % to < 50 %	<input type="checkbox"/> 42	10
	> 50%	<input type="checkbox"/> 43	20
Type II:	< 10 %	<input type="checkbox"/> 51	0
	10 % to < 50 %	<input type="checkbox"/> 52	20
	> 50 %	<input type="checkbox"/> 53	30

Code Checked from Section A or B: 32

Total Points Factor 2: 10

FACTOR 3: Conventional Pollutants

(only when limited by the permit)

A. Oxygen Demanding Pollutants: (check one) ☐ BOD ☐ COD ☐ Other: _____

Permit Limits: (check one)

	Code	Points
<input type="checkbox"/> < 100 lbs/day	1	0
<input type="checkbox"/> 100 to 1000 lbs/day	2	5
<input type="checkbox"/> > 1000 to 3000 lbs/day	3	15
<input type="checkbox"/> > 3000 lbs/day	4	20

Code Number Checked: NAPoints Scored: 0

B. Total Suspended Solids (TSS)

Permit Limits: (check one)

	Code	Points
<input checked="" type="checkbox"/> < 100 lbs/day	1	0
<input type="checkbox"/> 100 to 1000 lbs/day	2	5
<input type="checkbox"/> > 1000 to 5000 lbs/day	3	15
<input type="checkbox"/> > 5000 lbs/day	4	20

Code Number Checked: NAPoints Scored: 0C. Nitrogen Pollutants: (check one) ☐ Ammonia ☐ Other: _____

Permit Limits: (check one)

	Nitrogen Equivalent	Code	Points
<input type="checkbox"/> < 300 lbs/day		1	0
<input type="checkbox"/> 300 to 1000 lbs/day		2	5
<input type="checkbox"/> > 1000 to 3000 lbs/day		3	15
<input type="checkbox"/> > 3000 lbs/day		4	20

Code Number Checked: NAPoints Scored: 0Total Points Factor 3: 0**FACTOR 4: Public Health Impact**

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this include any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above reference supply.

☒ YES; (If yes, check toxicity potential number below)☐ NO; (If no, go to Factor 5)

Determine the Human Health potential from Appendix A. Use the same SIC doe and subcategory reference as in Factor 1. (Be sure to use the Human Health toxicity group column – check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input checked="" type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	0	<input type="checkbox"/> 7.	7	15
<input type="checkbox"/> 1.	1	0	<input type="checkbox"/> 4.	4	0	<input checked="" type="checkbox"/> 8.	8	20
<input type="checkbox"/> 2.	2	0	<input type="checkbox"/> 5.	5	5	<input type="checkbox"/> 9.	9	25
			<input type="checkbox"/> 6.	6	10	<input type="checkbox"/> 10.	10	30

Code Number Checked: 0Total Points Factor 4: 0

NPDES PERMIT RATING WORK SHEET

72
VA0C50002

FACTOR 5: Water Quality Factors

- A. Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-base federal effluent guidelines, or technology-base state effluent guidelines), or has a wasteload allocation been given o the discharge

	Code	Points
<input type="checkbox"/> YES	1	10
<input checked="" type="checkbox"/> NO	2	0

- B. Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

	Code	Points
<input checked="" type="checkbox"/> YES	1	0
<input type="checkbox"/> NO	2	5

- C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

	Code	Points
<input type="checkbox"/> YES	1	10
<input checked="" type="checkbox"/> NO	2	0

Code Number Checked: A 2 B 1 C 2
Points Factor 5: A 0 + B 0 + C 0 = 0

FACTOR 6: Proximity to Near Coastal Waters

- A. Base Score: Enter flow code here (from factor 2) 32

Check appropriate facility HPRI code (from PCS):

HPRI#	Code	HPRI Score
<input type="checkbox"/> 1	1	20
<input type="checkbox"/> 2	2	0
<input type="checkbox"/> 3	3	30
<input checked="" type="checkbox"/> 4	4	0
<input type="checkbox"/> 5	5	20

HPRI code checked : 4

Base Score (HPRI Score): 0 X (Multiplication Factor) 0.05 = 0

Enter the multiplication factor that corresponds to the flow code: .05

Flow Code	Multiplication Factor
11, 31, or 41	0.00
12, 32, or 42	0.05
13, 33, or 43	0.10
14 or 34	0.15
21 or 51	0.10
22 or 52	0.30
23 or 53	0.60
24	1.00

- B. Additional Points – NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

Code	Points
<input type="checkbox"/> 1	10
<input checked="" type="checkbox"/> 2	0

N/A

- C. Additional Points – Great Lakes Area of Concern

For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 area's of concern (see instructions)?

Code	Points
<input type="checkbox"/> 1	10
<input checked="" type="checkbox"/> 2	0

N/A

Code Number Checked: A 4 B 2 C 2
Points Factor 6: A 0 + B 0 + C 0 = 0

NPDES PERMIT RATING WORK SHEET

73
VA0C50002

SCORE SUMMARY

<u>Factor</u>	<u>Description</u>	<u>Total Points</u>
1	Toxic Pollutant Potential	0
2	Flows / Streamflow Volume	10
3	Conventional Pollutants	0
4	Public Health Impacts	0
5	Water Quality Factors	0
6	Proximity to Near Coastal Waters	0
TOTAL (Factors 1 through 6)		10

S1. Is the total score equal to or greater than 80 ☐ YES; (Facility is a Major) ☒ NO

S2. If the answer to the above questions is no, would you like this facility to be discretionary major?

☒ NO☐ YES; (Add 500 points to the above score and provide reason below:Reason: _____

_____NEW SCORE : 10
OLD SCORE : N/APermit Reviewer's Name : RE Smithson
Phone Number: 757-518-2106
Date: 03/17/14

ATTACHMENT 10

CHRONOLOGY SHEET

75

ATTACHMENT 10

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED
07/21/13		02/28/14		
04/16/14 (revised applic)				04/16/14
APPLICATION TO VDH: 04/16/14 VDH COMMENTS RECEIVED: 4/30/14				
APPLICATION TO OWPS: OWPS COMMENTS RECEIVED:				
APPLICATION ADMIN. COMPLETE: 04/16/14 APPLICATION TECH. COMPLETE: 04/16/14				
DATE FORWARDED TO ADMIN:				

Date _____ DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos, hearings, etc. affecting permit from application to issuance)

[illegible]

ATTACHMENT 11

OTHER DOCUMENTS



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director
Maria R. Nold
Regional Director

May 22, 2014

Mr. Kraig Westerbeek, Assist. V.P. Env., Health & Safety
C/O Mr. R.O. Britt, Sr. Env. Resource Manager
Murphy-Brown, LLC
P.O. Box 1240
434 East Main
Waverly, VA 23890

RE: Issuance of VPDES CAFO Permit No. VA0C50002
Murphy-Brown, LLC Farms 6, 7 and 8 (Dory Farm)
Draft Permit, Fact Sheet and Public Notice

Dear Mr. Westerbeek:

The State Water Control Board is considering issuing the referenced permit. **Please review the enclosed draft permit package with fact sheet and public notice carefully.**

Certain public notice procedures must be complied with before the actual permit can be approved. They are as follows:

1. The attached public notice must be published once a week for two consecutive weeks in a newspaper of general local circulation. We need the attached authorization to bill form filled out and signed and returned to DEQ, which will allow the newspaper to bill you for the public notice. In order for you to continue to discharge under state and federal laws, a new permit must be issued by the expiration date of the current permit. The term of the current permit cannot be extended beyond its expiration date if the owner is the cause of the delay in permit reissuance.

2. A minimum of 30 days will be allowed for public response following the date of the first public notice. If no public response is received, or the public response can be satisfactorily answered, then the permit will be processed. However, if there is significant public response, then we may hold a public hearing. You will be advised if this occurs.

If you have any questions or comments on the draft permit or public notice requirements, please contact me at (757) 518-2106.

Sincerely,

Robert E. Smithson, Jr.
Environmental Specialist Senior

Encl: Draft Permit and Fact Sheet, Public Notice

cc: DEQ-TRO ECM File

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of agricultural storm water from grass covered earthen structures that collect runoff from confined animal feeding operation production areas into a water body in Wakefield, Virginia (Southampton Co.)

PUBLIC COMMENT PERIOD: 30 days from the first date of this public notice (**date to be inserted by newspaper**)

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Stormwater issued by DEQ, under the authority of the State Water Control Board

NAME ADDRESS AND PERMIT NUMBER OF APPLICANT: Murphy-Brown, LLC-Waverly Division, P.O. Box 1240, 434 E. Main, Waverly VA; 23890; No. VA0C50002.

NAME AND ADDRESS OF FACILITY: Murphy-Brown, LLC Farms 6,7 and 8 (Dory Farm), 27409 Berlindory Rd., Wakefield, VA 23888

DISCHARGE LOCATION/RECEIVING STREAM/WATERSHED: Wakefield, VA; Unnamed Tributaries to Indigo Br. & Horsepen Br. of Round Hill Swamp; Chowan Rv. and Dismal Swamp Basin watershed. A watershed is the land area drained by a river and its incoming streams.

PROJECT DESCRIPTION: Murphy-Brown, LLC operates a confined animal feeding operation and has applied for the issuance of a permit for the discharge of treated stormwater collected in one of five grass covered earthen structures (BMPs) that collect runoff from animal production areas. Each BMP is inspected daily to ensure that there are no visible contaminants prior to being released by gate valve to the receiving ditch/stream. If contaminants are observed, a recovery process is first implemented prior to rainwater release. The applicant proposes to discharge an estimated rainfall dependant flow of 0.024 million gallons per day into an unnamed tributary of both the Indigo & Horsepen Branches of Round Hill Swamp. In addition to stormwater & BMP areas, the permit requires monitoring of waste storage structures, treated animal wastewater (30.6 MG generated annually) monitored for nutrients prior to land application (539 acres of hay & row crops under the control of the permittee); soils monitoring at land application sites; and groundwater monitoring.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing hand-delivery, by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: : Robert Smithson, DEQ Tidewater Regional Office, 5636 Southern Blvd. Va. Beach 23462. Tel: 757-518-2106; E-mail: robert.smithsonjr@deq.virginia.gov; Fax: 757-518-2009. The public may review the draft permit and application at the DEQ office named above by appointment or may request copies of the documents from the contact person listed above.

Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Wednesday, May 21, 2014 9:02 AM
To: Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ); Bowles, Betsy (DEQ); Zahradka, Neil (DEQ)
Subject: RE: Permit Application for Review-Revised Permit #VPA01074 conversion to VPDES, Murphy Brown LLC

We have *not received DSS comments on these 2 MB applications*. We are going to EPA with the drafts later this week (delayed due to OLAP permit number changes at the 13th hour) & then to PN shortly thereafter. We would like DSS comments for the record, but if we do not receive them we will go to PN without them & indicate that DSS did not comment.

From: Smithson Jr., Robert (DEQ)
Sent: Tuesday, May 06, 2014 9:21 AM
To: Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ); Bowles, Betsy (DEQ)
Subject: FW: Permit Application for Review-Revised Permit #VPA01074 conversion to VPDES, Murphy Brown LLC

Keith,

We need your comments on this application ASAP. It is EPA sensitive. Please respond this week with a brief e-mail. Thanks.

From: Smithson Jr., Robert (DEQ)
Sent: Wednesday, April 16, 2014 4:58 PM
To: Horne, Daniel (VDH); Howell, Beth (MRC); Stagg, Ben (MRC); Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ)
Subject: Permit Application for Review-Revised Permit #VPA01074 conversion to VPDES, Murphy Brown LLC

Below is the link for the above referenced VPDES CAFO permit application. You will find each of your letters in the fileshare file. Please pull the information that you need off the ftp site. If you have any questions, please let me know.

<http://www.deq.virginia.gov/fileshare/wps/permit/tro/VDH,%20DSS,%20VMRC%20For%20Review/VPA01074%20Murphy%20Brown%20Farms%201-5/>

Smithson Jr., Robert (DEQ)

From: Bowles, Betsy (DEQ)
Sent: Friday, May 16, 2014 5:25 PM
To: Sauer, Mark (DEQ); Smithson Jr., Robert (DEQ); Mullins, Seth (DEQ); Winter, Kyle (DEQ)
Cc: Zahradka, Neil (DEQ)
Subject: RE: Murphy Brown VPDES permits/permit numbers/CEDS
Attachments: RE: VPDES IP Numbers - Murphy Brown Facilities (Isle of Wight Co); VPDES applicant tracking updated 2014 with inspections rev 5 16 14.xlsx

Mark, Thank you for the update. I sent an email updating Mark and Joel with EPA Region III today.

During the conference call yesterday, Bob asked me about finalizing the M-B permit numbers and mentioned printing DMRs. First, I want to provide you all with the new finalized VPDES CAFO Permit numbers (see below) which were finalized today. I am sorry for any inconvenience this may cause but before the drafts are sent out the permit numbers need to be changed so they will conform with the new CEDS formatting.

VPDES CAFO IP - the permit numbering format shall begin with [VA0C] and be followed by five digits. The permit number will be generated by the CEDS system. The next number will indicate the regional office in which the operation is located. The regional identifiers are as follows:

Region	Regional Identifier	Example Number: First permit number
SWRO	1	VA0C10001
BRRO	2	VA0C20001
NRO	3	VA0C30001
PRO	4	VA0C40001
TRO	5	VA0C50001
VRO	6	VA0C60001

Each permit number will be sequential by region. For example the first permit issued by the Piedmont Regional Office will be VA0C40001 and the tenth permit issued will be VA0C40010.

Please Note: the "0" in "VA0C" is a zero.

Second, back in February I sent an email stating that these VPDES permits would not be added to Legacy CEDS (see attached email). I checked CEDS yesterday and found that the records are in application classification at this time. I conferred with OIS today and it was determined that the application records need to be deleted in order to avoid any issues with the other modules in CEDS as well as with the future migration into the new permit module.

The spreadsheet that CO and RO staff have been using to track and categorize the VPDES Permit Applicants includes a worksheet (the first tab labeled permit tracking) to track the permit event dates until such time that the new CEDS permit module is made available. I am including another copy of the spreadsheet in this email.

Let me know if there are any events that you feel are missing from the spreadsheet so that I can add them. The permit details (such as: animal types and numbers) and site details (such as: information related to the location – example lat., long., basin information, etc.) will be added when the permit data is added in the new module.

Thank for all your hard work on getting these permits issued.

Have a great weekend,
Betsy

Betsy K. Bowles
Animal Feeding Operations Program Coordinator
Virginia Department of Environmental Quality
629 East Main Street
Richmond, VA 23219
804-698-4059 direct line
804-698-4032 fax

betsy.bowles@deq.virginia.gov

Mailing Address:
P.O. Box 1105
Richmond, VA 23218

Program Websites:

<http://www.deq.state.va.us/Programs/Water/LandApplicationBeneficialReuse/LivestockPoultry.aspx>

<http://www.deq.state.va.us/Programs/Water/LandApplicationBeneficialReuse/LivestockPoultry/VirginiaPoultryWasteManagementRequirement.aspx>

<http://www.deq.state.va.us/Programs/Water/LandApplicationBeneficialReuse/Agriculture.aspx>

From: Sauer, Mark (DEQ)
Sent: Friday, May 16, 2014 12:07 PM
To: Bowles, Betsy (DEQ); Smithson Jr., Robert (DEQ); Zahradka, Neil (DEQ); Mullins, Seth (DEQ); Winter, Kyle (DEQ)
Subject: Murphy Brown VPDES permits

The Murphy Brown draft VPDES permits and fact sheets for both farms 1-5 and 6-8 are finalized.

Bob has to add a couple of hard-copy documents to the fact sheet attachments and then will scan them and put them in a file share folder Monday morning and will let Betsy and Seth know they are there. At that point I believe Betsy will send them to EPA.

Thanks,

Mark

Mark Sauer
DEQ-TRO Water Permits Section
757-518-2105
mark.sauer@deq.virginia.gov



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462

(757) 518-2000 Fax (757) 518-2009

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

April 17, 2014

Mr. Kraig Westerbeek, Assist. VP of Env. Health & Safety
C/O R.O. Britt, Sr. Env. Resource Manager
Murphy Brown, LLC
P.O. Box 1240
Waverly, VA 23890

RE: VPDES CAFO Permit Applications for Farms 1-5 & 6-8 (previously VPA01074 & VPA01075)
Murphy Brown, LLC
Waverly VA

Dear Mr. ^{R.O.}~~Britt~~:

Your revised applications with attachments received April 16, 2014 have been reviewed and they appear to be administratively complete. Other reviews of the application will be required by state agencies to ensure that public health and the environment will be protected.

The next steps involve assembling the information necessary to develop the permit limitations and then drafting the permit. Once the draft permit is prepared and the appropriate reviews are performed, I will transmit the draft permit and supporting documentation to you for review. We anticipate that to occur about Mid-May, barring unforeseen circumstances.

Thank you for your cooperation in submitting the completed application. If you have any questions about our procedures or the status of your draft permit, please feel free to call me at (757) 518-2106.

Sincerely,

Robert E. Smithson
Environmental Specialist Senior

cc: DEQ ECM File

Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Wednesday, April 16, 2014 5:01 PM
To: Horne, Daniel (VDH); Howell, Beth (MRC); Stagg, Ben (MRC); Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ)
Subject: FW: Permit Application for Review-Revised Permit #VPA01075 conversion to VPDES, Murphy Brown LLC

Below is the link for the above referenced VPDES CAFO permit application. You will find each of your letters in the fileshare file. Please pull the information that you need off the ftp site. If you have any questions, please let me know.

<http://www.deq.virginia.gov/fileshare/wps/permit/tro/VDH,%20DSS,%20VMRC%20For%20Review/VP A01075%20Murphy%20Brown%20Farms%206-8/>

Smithson Jr., Robert (DEQ)

From: Skiles, Keith (VDH)
Sent: Thursday, May 22, 2014 8:24 AM
To: Smithson Jr., Robert (DEQ)
Subject: RE: Permit Application for Review-Revised Permit #VPA01074 conversion to VPDES, Murphy Brown LLC

Bob,

DSS has no comments on applications VPA1074 and VPA1075. Let me know if you need anything else.

Keith

From: Smithson Jr., Robert (DEQ)
Sent: Wednesday, May 21, 2014 9:02 AM
To: Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ); Bowles, Betsy (DEQ); Zahradka, Neil (DEQ)
Subject: RE: Permit Application for Review-Revised Permit #VPA01074 conversion to VPDES, Murphy Brown LLC

We have *not received DSS comments on these 2 MB applications*. We are going to EPA with the drafts later this week (delayed due to OLAP permit number changes at the 13th hour) & then to PN shortly thereafter. We would like DSS comments for the record, but if we do not receive them we will go to PN without them & indicate that DSS did not comment.

From: Smithson Jr., Robert (DEQ)
Sent: Tuesday, May 06, 2014 9:21 AM
To: Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ); Bowles, Betsy (DEQ)
Subject: FW: Permit Application for Review-Revised Permit #VPA01074 conversion to VPDES, Murphy Brown LLC

Keith,

We need your comments on this application ASAP. It is EPA sensitive. Please respond this week with a brief e-mail. Thanks.

From: Smithson Jr., Robert (DEQ)
Sent: Wednesday, April 16, 2014 4:58 PM
To: Horne, Daniel (VDH); Howell, Beth (MRC); Stagg, Ben (MRC); Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ)
Subject: Permit Application for Review-Revised Permit #VPA01074 conversion to VPDES, Murphy Brown LLC

Below is the link for the above referenced VPDES CAFO permit application. You will find each of your letters in the fileshare file. Please pull the information that you need off the ftp site. If you have any questions, please let me know.

<http://www.deq.virginia.gov/fileshare/wps/permit/tro/VDH,%20DSS,%20VMRC%20For%20Review/VPA01074%20Murphy%20Brown%20Farms%201-5/>



COMMONWEALTH of VIRGINIA

Marissa J. Levine, MD, MPH, FAAFP
State Health Commissioner

John J. Aulbach II, PE
Director, Office of Drinking Water

DEPARTMENT OF HEALTH OFFICE OF DRINKING WATER

Southeast Virginia Field Office

MEMORANDUM

830 Southampton Avenue
Suite 2058
Norfolk, VA 23510
Phone (757) 683-2000
Fax (757) 683-2007

TO: Mr. Robert E. Smithson
Environmental Engineer Senior
Department of Environmental Quality – Tidewater Regional Office

DATE: APR 28 2014

FROM: Daniel B. Horne, PE
Engineering Field Director

DBH

RECEIVED – DEQ

APR 30 2014

Tidewater Regional
Office

CITY/COUNTY: SOUTHAMPTON COUNTY

PROJECT TYPE: ☒ New ☐ Renewal or Revision

☒ VPDES ☐ VPA ☐ VWPP ☐ JPA ☐ Other: _____

☒ Number: VPA01075 (Conversion to VPDES CAFO Permit)

OWNER/APPLICANT: Murphy-Brown LLC

PROJECT: Murphy Brown Farms 6-8 (Dory Farm)

- ☒ There are no public water supply raw water intakes located within 15 miles downstream or within one tidal cycle upstream of the existing project.
- ☐ The raw water intake for the _____ waterworks is located _____ miles [downstream/upstream] of the discharge. This should be a sufficient distance to minimize the impacts of the discharge. We recommend a minimum Reliability Class of ____ for this facility.
- ☐ The raw water intake for the _____ waterworks is located _____ miles [downstream/upstream (within one tidal cycle)] of the discharge.
- ☐ Please forward a copy of the Draft Permit for our review and comment.
- ☒ Comments: A public water supply raw water intake serving the City of Norfolk withdraws from the Nottoway River at a location approximately 17 miles downstream of this project.

Prepared by:

Renée S. Hall

Renée S. Hall
District Engineer

pc: Ms. Kristen M. Lentz, PE, Director, City of Norfolk, Dept. of Utilities
V.D.H. - Office of Drinking Water, Field Services Engineer

\\Odwsevf\district\DIST20B\Southampton County\General\VPDES Murphy Brown Farm 2014.docx

Smithson Jr., Robert (DEQ)

From: RO Britt [ROBritt@murphybrownllc.com]
Sent: Wednesday, April 16, 2014 2:10 PM
To: Smithson Jr., Robert (DEQ)
Attachments: CAFO Permit Application - Addendum and Maps MB 6-8.pdf; CAFO Permit Application - Addendum and Maps MB 1-5.pdf

Bob,

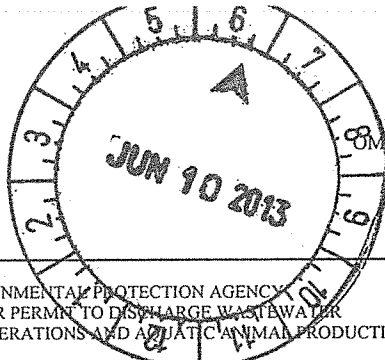
Please see the attached files. They include revised maps and the associated Permit Application Addendum. If you have any questions or concerns please let me know. Thanks

R. O. Britt

Senior Environmental Resource Manager | Murphy-Brown, LLC | Post Office Box 1240 / 434 East Main | Waverly | VA | 23890

☎: 804-834-1229 (O) | 📠: 804-834-8926 (F) | ✉: robritt@murphybrownllc.com

28



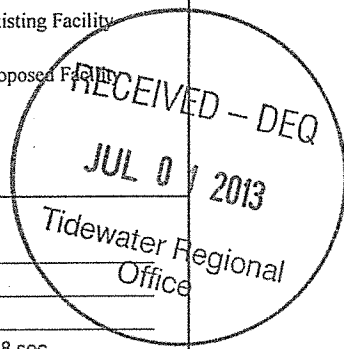
Form Approved
OMB No. 2040-0250

EPA I.D. NUMBER (copy from Item 1 of Form 1)

FORM 2B NPDES	EPA	U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATIONS FOR PERMIT TO DISCHARGE WASTEWATER CONCENTRATED ANIMAL FEEDING OPERATIONS AND AQUATIC ANIMAL PRODUCTION FACILITIES
----------------------------	------------	--

I. GENERAL INFORMATION Applying for: Individual Permit ☒ Coverage Under General Permit ☐

A. TYPE OF BUSINESS	B. CONTACT INFORMATION	C. FACILITY OPERATION STATUS
<input checked="" type="checkbox"/> 1. Concentrated Animal Feeding Operation (complete items B, C, D, and section II) <input type="checkbox"/> 2. Concentrated Aquatic Animal Production Facility (complete items B, C, and section III)	Owner/or Operator Name: <u>Murphy-Brown LLC</u> Telephone: (<u>804</u>) <u>834-2109</u> Address: <u>P.O. Box 1240</u> Facsimile: (<u>804</u>) <u>834-8926</u> City: <u>Waverly</u> State: <u>VA</u> Zip Code: <u>23890</u>	<input checked="" type="checkbox"/> 1. Existing Facility <input type="checkbox"/> 2. Proposed Facility



D. FACILITY INFORMATION

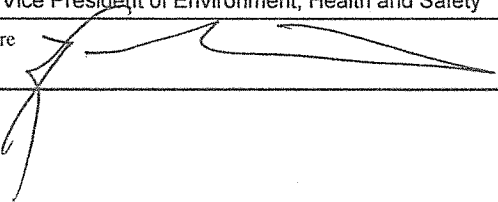
Name: Murphy-Brown LLC Farm 6,7 and 8 Telephone: (804) 834-2109
 Address: 27409 Berlindory Road Facsimile: (804) 834-8926
 City: Wakefield State: Virginia Zip Code: 23888
 County: Southampton Latitude: 36 deg. 57 min. 35 sec. Longitude: 77 deg. 02 min. 28 sec.

If contract operation: Name of Integrator: N/A
 Address of Integrator: N/A

II. CONCENTRATED ANIMAL FEEDING OPERATION CHARACTERISTICS

A. TYPE AND NUMBER OF ANIMALS			B. MANURE, LITTER, AND/OR WASTEWATER PRODUCTION AND USE
1. TYPE	2. ANIMALS		1. How much manure, litter, and wastewater is generated annually by the facility? <u>N/A</u> tons <u>30.6M</u> gallons 2. If land applied how many acres of land under the control of the applicant are available for applying the CAFOs manure/litter/wastewater? <u>256</u> acres 3. How many tons of manure or litter, or gallons of wastewater produced by the CAFO will be transferred annually to other persons? <u>0</u> tons <u>0</u> gallons
	NO. IN OPEN CONFINEMENT	NO. HOUSED UNDER ROOF	
<input type="checkbox"/> Mature Dairy Cows			
<input type="checkbox"/> Dairy Heifers			
<input type="checkbox"/> Veal Calves			
<input type="checkbox"/> Cattle (not dairy or veal calves)			
<input checked="" type="checkbox"/> Swine (55 lbs. or over)		22,050	
<input checked="" type="checkbox"/> Swine (under 55 lbs.)		9,450	
<input type="checkbox"/> Horses			
<input type="checkbox"/> Sheep or Lambs			
<input type="checkbox"/> Turkeys			
<input type="checkbox"/> Chickens (Broilers)			
<input type="checkbox"/> Chickens (Layers)			
<input type="checkbox"/> Ducks			
<input type="checkbox"/> Other: Specify _____			
3. TOTAL ANIMALS		31,500	

C. <input checked="" type="checkbox"/> TOPOGRAPHIC MAP		
D. TYPE OF CONTAINMENT, STORAGE AND CAPACITY		
1. Type of Containment	Total Capacity (in gallons)	
<input type="checkbox"/> Lagoon		
<input type="checkbox"/> Holding Pond		
<input type="checkbox"/> Evaporation Pond		
<input type="checkbox"/> Other: Specify _____		
2. Report the total number of acres contributing drainage: <u>256</u> acres		
3. Type of Storage	Total Number of Days	Total Capacity (gallons/tons)
<input checked="" type="checkbox"/> Anaerobic Lagoon	180	106,350,669 gals.
<input type="checkbox"/> Storage Lagoon		
<input type="checkbox"/> Evaporation Pond		
<input type="checkbox"/> Aboveground Storage Tanks		
<input type="checkbox"/> Belowground Storage Tanks		
<input type="checkbox"/> Roofed Storage Shed		
<input type="checkbox"/> Concrete Pad		
<input type="checkbox"/> Impervious Soil Pad		
<input type="checkbox"/> Other: Specify _____		
E. NUTRIENT MANAGEMENT PLAN		
<p>Note: Effective February 27, 2009, a permit application is not complete until a nutrient management plan is submitted to the Permitting Authority.</p> <p>1. Please indicate whether a nutrient management plan has been included with this permit application. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. If no, please explain:</p> <p>3. Is a nutrient management plan being implemented for the facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>4. The date of the last review or revision of the nutrient management plan. Date: <u>05/10/12</u></p> <p>5. If not land applying, describe alternative use(s) of manure, litter, and/or wastewater:</p>		
F. LAND APPLICATION BEST MANAGEMENT PRACTICES		
<p>Please check any of the following best management practices that are being implemented at the facility to control runoff and protect water quality:</p> <p><input checked="" type="checkbox"/> Buffers <input checked="" type="checkbox"/> Setbacks <input checked="" type="checkbox"/> Conservation tillage <input type="checkbox"/> Constructed wetlands <input type="checkbox"/> Infiltration field <input checked="" type="checkbox"/> Grass filter <input type="checkbox"/> Terrace</p>		

III. CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY CHARACTERISTICS					
A. For each outfall give the maximum daily flow, maximum 30-day flow, and the long-term average flow.				B. Indicate the total number of ponds, raceways, and similar structures in your facility.	
1. Outfall No.	2. Flow (gallons per day)			1. Ponds	2. Raceways
	a. Maximum Daily	b. Maximum 30 Day	c. Long Term Average	C. Provide the name of the receiving water and the source of water used by your facility.	
				1. Receiving Water	2. Water Source
D. List the species of fish or aquatic animals held and fed at your facility. For each species, give the total weight produced by your facility per year in pounds of harvestable weight, and also give the maximum weight present at any one time.					
1. Cold Water Species			2. Warm Water Species		
a. Species	b. Harvestable Weight (pounds)		a. Species	b. Harvestable Weight (pounds)	
	(1) Total Yearly	(2) Maximum		(1) Total Yearly	(2) Maximum
E. Report the total pounds of food during the calendar month of maximum feeding.			1. Month	2. Pounds of Food	
IV. CERTIFICATION					
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.					
A. Name and Official Title (print or type) Assistant Vice President of Environment, Health and Safety			B. Telephone (910) 239-3434		
C. Signature 			D. Date Signed 4-8-13		

VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT CONCENTRATED ANIMAL FEEDING OPERATIONS

PERMIT APPLICATION ADDENDUM

PLEASE TYPE OR PRINT ALL INFORMATION - ALL PARTS OF THIS FORM MUST BE COMPLETED

For DEQ Use Only:

Complete: Yes ☒ No ☐

Initials: MB

Date: 4/16/14

I. CONTACT INFORMATION

Owner Name:	Murphy-Brown LLC		
Mailing Address:	P.O. Box 1240		
City:	Waverly	State:	Virginia
Zip Code:	23890		
E-Mail Address:	robriitt@murphybrownllc.com		
Business Phone:	(804) 834-2109	Mobile Phone:	(804) 731-9603
Home Phone:			
Best day of the week & time to contact the applicant:	Day(s)	Time(s)	<input type="checkbox"/> AM <input type="checkbox"/> PM
	Mon.- Fri.	8:00am – 5:00pm	<input type="checkbox"/> PM

II. FARM/FACILITY INFORMATION

Farm/Facility Name:	Murphy-Brown LLC Farm 6, 7 and 8		
Location:	27409 Berlindory Road, Wakefield, Virginia, 23888		
Does Farm/Facility have an existing permit?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, Permit Number:	VPA01075

III. FARM OPERATING MANUAL

- A. Operating Manual been developed for this facility?
- B. date of the last review/revision of the Farm Operating Manual.
- C. Manual (if already developed) is attached:
The attached copy may be a hard copy or an electronic copy.
- Has a Farm ☐ Yes ☒ No
- If yes, provide the Date: _____
- A copy of the ☐ Yes ☐ No.

RECEIVED – DEQ

APR 16 2014

Tidewater Regional
Office

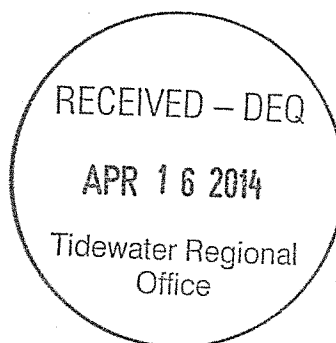
IV. GROUNDWATER MONITORING PLAN

- A. If the facility has an existing permit, is groundwater monitoring required? ☒ Yes ☐ No
- B. If yes, has a Groundwater Monitoring Plan been developed for this facility? ☐ Yes ☒ No ? N/A
- C. If yes, provide the date of the last review/revision of the Groundwater Monitoring Plan. Date: _____
- D. If no, please explain: A geophysical evaluation of the site is being conducted to establish the framework for a new Groundwater Monitoring Plan.

E.

A copy of the Plan (if already developed) is attached:
The attached copy may be a hard copy or an electronic copy.

? Yes ☒ No ? N/A



Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Friday, February 28, 2014 3:26 PM
To: 'RO Britt'
Subject: Outfall Location Maps and Production Area Square Footage

R.O.,

Along with the maps you are providing of each outfall location for Farms 1-5 and 6-8, we need to know the total square footage of each contributing production area (stormwater runoff) and if any of the surrounding production area of each outfall has impervious surfaces. If you provide this information that would be a help. If not, provide the input concerning impervious land surfaces, if there are any. Thanks.

MB Farms 6-8
(Dory Farm)

IV. DISCHARGE POINT AND BEST MANAGEMENT PRACTICES (BMPs) RELATED TO A DISCHARGE POINT

For each discharge point, provide the following information in the table below:

- a descriptive name of the discharge point;
- the latitude and longitude of its location;
- the name of the nearest potential receiving water;
- all areas contributing manure, litter, process wastewater, or storm water from the facility; and
- the treatment received or BMPs utilized, installed or constructed prior to the discharge point.

Form ID/Use ID Number	Discharge Point	Latitude	Longitude	Name of Nearest Potential Receiving Water	Area Contributing Flow	Treatment/BMPs
001		36°51'23.47" N	77°02'23.27" W	Unnamed tributary to Indigo Branch	Production Area – Farm 6	Secondary Containment
002		36°51'20.45" N	77°02'08.62" W	Unnamed tributary to Indigo Branch	Production Area – Farm 6	Secondary Containment
003		36°51'47.91" N	77°02'29.07" W	Unnamed tributary to Hoursepen Branch	Production Area – Farm 8	Secondary Containment
004		36°51'54.06" N	77°02'17.51" W	Unnamed tributary to Hoursepen Branch	Production Area – Farm 8	Secondary Containment
005		36°52'00.55" N	77°01'55.59" W	Unnamed tributary to Hoursepen Branch	Production Area – Farm 7	Secondary Containment

V. BEST MANAGEMENT PRACTICES (BMPs)

- A. BMPs are utilized, installed or constructed for each of the areas listed in Section V above.

X Yes ☐ No

B.

If no, please explain:

- C. Attach to this Addendum, a description of the BMPs listed above in Section V or a copy of the Farm Operating Manual (if already developed). The attached copy may be a hard copy or an electronic copy.

VI. OTHER ATTACHMENTS (see instructions for requirements)

- A. The completed and signed Local Government Ordinance Form (LGOF) is attached: ? Yes ? No ☒ On file with DEQ
- B. A copy of the Department of Conservation and Recreation (DCR) Nutrient Management Plan (NMP) approval letter is attached: ☒ Yes ? No

VII. CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Kraja Westerbeek

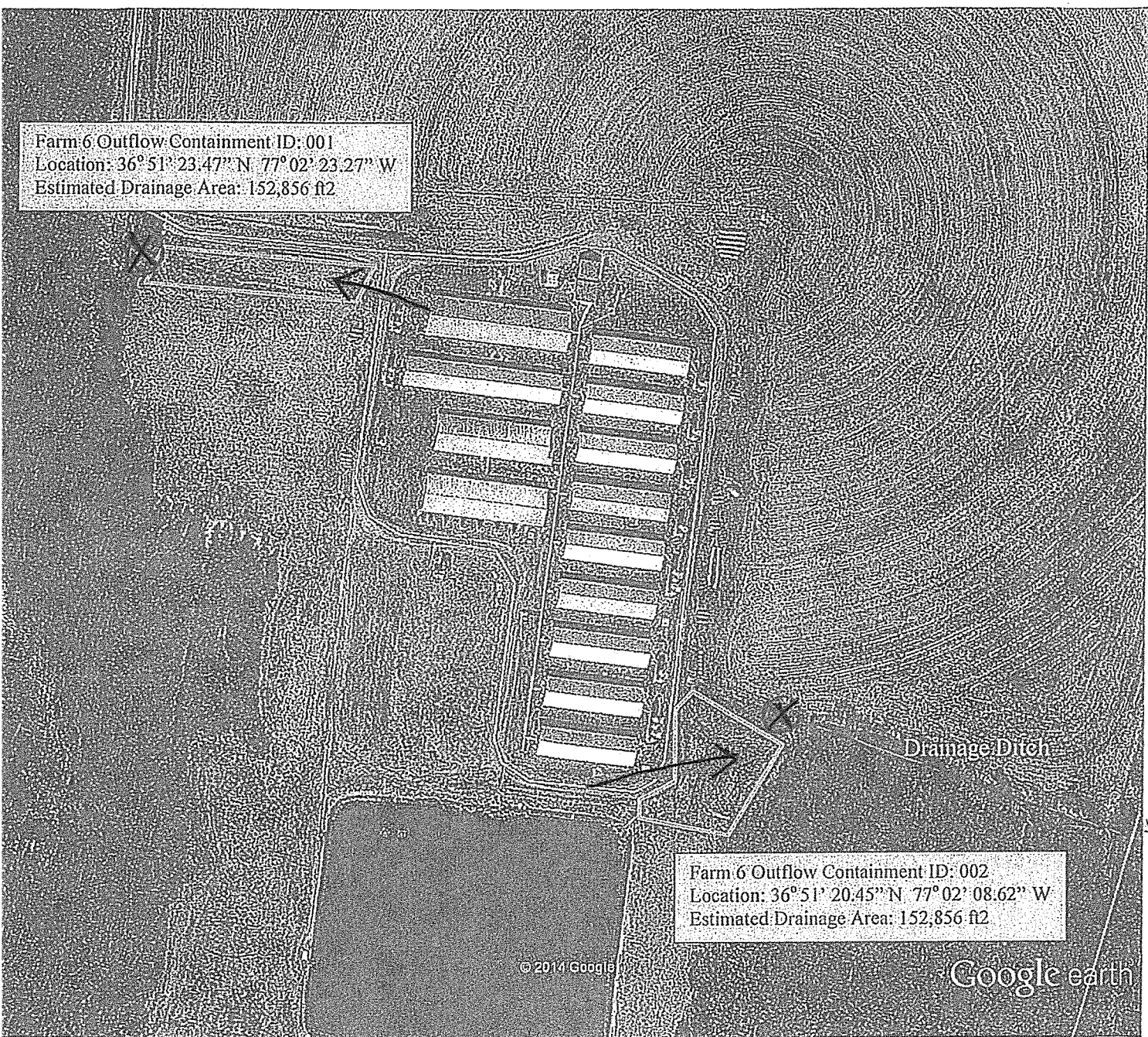
Official Title: Assistant Vice President Environment, Health, & Safety

Signature: [Signature]

Date: 4-15-14



Murphy-Brown LLC
 Farm 6
 Secondary Containment Diagram



Key

Secondary Containment Location	—————	Intermittent Stream	- - - - -
Containment Valve	⊗		
Inlet & Direction of Surface Water Flow	➡		

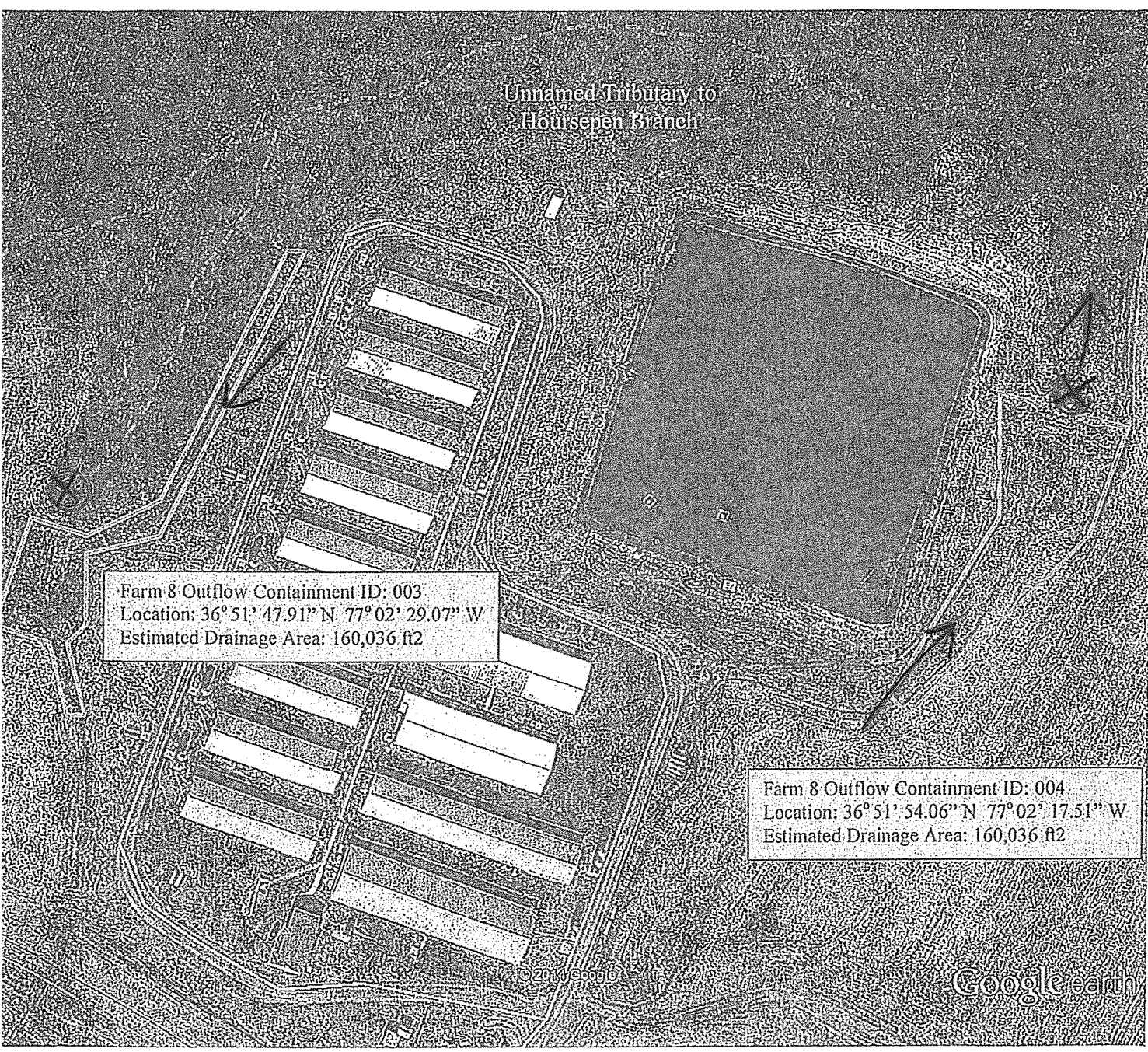
Murphy-Brown LLC
 Farm 7
 Secondary Containment Diagram



Key

Secondary Containment Location	—————	Intermittent Stream	- - - - -
Containment Valve	⊗		
Inlet & Direction of Surface Water Flow	➡		

Murphy-Brown LLC
Farm 8
Secondary Containment Diagram



Key

Secondary Containment Location	—————	Intermittent Stream	- - - - -
Containment Valve	⊗		
Outlet & Direction of Surface Water Flow	➡		

BMP Description – Secondary Containment

The BMP is a grass covered earthen containment structure that collects runoff from the production area. The structure has a manually operated valve that is maintained as normally closed. The BMP is inspected daily by the farm production staff. Once water collects in the structure it is visually inspected to ensure it does not contain any contaminants and it released. The BMP has an emergency spillway for structural integrity during extreme rainfall events.

Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Wednesday, March 19, 2014 2:35 PM
To: Sauer, Mark (DEQ)
Subject: FW: M-B Secondary Containment Procedure

Fact sheet excerpt: Storm water runoff is collected in one of ⁵~~ten~~ secondary containment basins (grass covered earthen structures that collect runoff from production area). Each BMP is inspected daily to ensure that there are no visible contaminants prior to being released by gate valve to the receiving ditch/stream. If contaminants are observed, a recovery process is implemented prior to valve opening to release rainwater. These procedures will be addressed in the Farm Operating Manual.

From: RO Britt [<mailto:ROBritt@murphybrownllc.com>]
Sent: Wednesday, March 19, 2014 2:16 PM
To: Smithson Jr., Robert (DEQ)
Cc: Sauer, Mark (DEQ); Bowles, Betsy (DEQ)
Subject: RE: M-B Secondary Containment Procedure

The recovery process ultimately depends on the contaminant. If it were fuel or oil that is one procedure, if it were waste water there would be another procedure. The foundation of all those are similar and as follows:

1. Stop the source
2. Contain the flow
3. Contact the appropriate authority
4. Stay with the incident until relieved
5. Recovery depends on the contaminant

Example: For waste water the water would be pumped either back into the lagoon or recovered and land applied to an application field.

I am not aware of any incident caused rainfall that has demonstrated visual contaminants that required recovery.

R. O. Britt

Senior Environmental Resource Manager | Murphy-Brown, LLC | Post Office Box 1240 / 434 East Main | Waverly | VA | 23890

☎: 804-834-1229 (O) | 📠: 804-834-8926 (F) | ✉: robritt@murphybrownllc.com

From: Smithson Jr., Robert (DEQ) [<mailto:Robert.SmithsonJr@deq.virginia.gov>]
Sent: Wednesday, March 19, 2014 1:59 PM
To: RO Britt
Cc: Sauer, Mark (DEQ); Bowles, Betsy (DEQ)
Subject: RE: M-B Secondary Containment Procedure

This stops short of answering the question. What is the "recovery" process? If there are visible contaminants from runoff, what occurs?. To your knowledge has there ever been an occasion where rainwater runoff collection looked contaminated and a recovery process was implemented?

From: RO Britt [<mailto:ROBritt@murphybrownllc.com>]
Sent: Wednesday, March 19, 2014 1:24 PM
To: Smithson Jr., Robert (DEQ)
Subject: M-B Secondary Containment Procedure

Bob,

The attached procedure describes our Secondary Containment Management Procedure. Please let me know if you have any questions. Thanks

Murphy-Brown <small>LLC</small> <i>EMS Policies/Procedures</i>	Secondary Containment	Original Date: 5/1/04 Revision Date: 4/1/10	Doc.# MB 035 Page 1 of 2
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1.0 PURPOSE AND SCOPE

Purpose: To provide guidelines for the management of secondary containment structures where present.

Scope: All Murphy-Brown Eastern Operations sites

2.0 REQUIREMENTS

The goal of secondary containment is to reduce risk. Farms may have two different types of secondary containment, one is for wastewater spills or leaks and the other is for fuel. Each is managed similarly.

Support Operations may also have secondary containment for fuel, liquid fat, or other liquid ingredients.

Principles for operating a secondary containment structure:

1. The knife gate, valve, or other point of outlet control mechanism must be closed when a spill occurs to be effective. Therefore at all possible times the **outlet must be kept closed**, except for when clean rainwater is actively being released from the containment structure, so that it will be empty for a future potential spill or rain event.
2. The secondary containment should be kept in a normally dry condition. If water is in the containment structure prior to a spill then there is 1) less volume available to store the spill, and 2) more contaminated fluid to remove and dispose of properly. Additionally, a containment structure with a dry bottom allows for much easier observation and earlier detection of potential spills. A dry / empty secondary containment is designed to hold the contents of the largest tank within it, or a minimum of 12 hours of operation by the recycle pump.

Operation:

1. **The farm staff or support operation staff is responsible for checking the containment structure each day.** This check should be completed as early as the containment can be observed effectively and safely. In all cases a secondary containment should be checked before noon each day.
2. If any water is found to be in the structure, a careful inspection of the contents within the containment structure shall be performed to ensure that no wastewater or contaminants are present. If there is no evidence of wastewater or contaminants, the valve/gate should be opened to allow the rainwater to drain out. While working the valve, personnel should observe the water outlet to be sure that erosion is not occurring to the dike at the pipe outlet. Upon emptying the valve/gate should be returned to the closed position.

Murphy-Brown LLC <i>EMS Policies/Procedures</i>	Secondary Containment	Original Date: 5/1/04 Revision Date: 4/1/10	Doc.# MB 035 Page 2 of 2
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3. The farm manager or designee shall ensure that the gate is closed when the last employee leaves the facility regardless of if the containment pond is dry or partially full of water. [Note: Valves may not seal if debris, dirt, or trash prevents proper and complete closure of the valve, in which case the secondary containment will not be effective as desired.]
4. On farms, LNM personnel will inspect the secondary containment specific to structural integrity, accessibility, and general operating condition. This inspection will be documented as a part of their weekly inspection.
5. If wastewater, fuel, fat or other contaminants are found in the containment, make the appropriate contacts as indicated on the Environmental Emergency Contact Plan, ensure that the source has been stopped, and then begin the recovery process.

3.0 REFERENCES

None

4.0 FORMS

EMS Internal Audits
EMS Farm Manager Checklist
Weekly LNM Inspection
Storm Water Qualitative Monitoring Checklist (for mills only)
Supporting Ops Monthly Checklists

5.0 DEFINITIONS

Secondary containment – Secondary containment is designed to capture any liquid that might spill or leak from its intended location. The outlets of these structures will generally be operated in a normally closed position.

6.0 REVISION HISTORY

Revision #1 Dated 9/18/06 Assigned responsibilities and “how to” of valve management for secondary containment.
Revision #2 Dated 5/1/07 Included all types of containment structures.
Revision #3 Dated 3/27/09 Removed references to slam gates; added LNM oversight during weekly inspection.
Revision #4 Dated 4/1/10 Added operational requirements for checking the containment

Douglas W. Domenech
Secretary of Natural Resources



David A. Johnson
Director

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street
Richmond, Virginia 23219-2010
(804) 786-1712

June 28, 2012

Mr. R. O. Britt
Murphy-Brown Farms 8506, 8507, & 8508 (6, 7, & 8)
P.O. Box 1240
Waverly, VA 23890



Dear Mr. Britt,

Your nutrient management plan (NMP), dated 5/10/2012, for a 31500 head swine operation has been approved by the Virginia Department of Conservation and Recreation for coverage under a Virginia Pollution Abatement (VPA) or Virginia Pollutant Discharge Elimination System (VPDES) permit. Your NMP was written by a nutrient management planner certified by the Virginia Department of Conservation and Recreation.

A copy of this letter must be kept with your nutrient management plan. A copy of this letter and a copy of the approved plan must be sent to the Tidewater Regional Office of the Virginia Department of Environmental Quality (DEQ).

It should be noted that this plan expires 5/10/2015. We recommend the process of revising this nutrient management plan begin at least six months prior to the expiration date.

If you have any questions concerning this letter, please feel free to contact me at bobby.long@dcr.virginia.gov or (434) 547-8172.

Sincerely,

A handwritten signature in cursive script that reads "Bobby Long".

Bobby Long
Nutrient Management Coordinator – Animal Waste
Division of Stormwater Management

cc: Tim Sexton, DCR Nutrient Management Program Manager
Kurt Elmer, Murphy-Brown LLC
DEQ Tidewater Regional Office

NUTRIENT MANAGEMENT PLAN IDENTIFICATION

Operator

Murphy-Brown LLC
434 East Main Street
Waverly, VA 23890
(804) 834-2109

Integrator: None

Farm Coordinates

Easting: 319000, Northing: 4082500, zone: 17

Watershed Summary

watershed: CU65
county: Southampton

Nutrient Management Planner

Kurt Elmer
434 East Main Street
Waverly, VA 23890

Certification Code: 575

Acreage Use Summary

Total Acreage in this plan: 538.7

Cropland: 437.
Hayland: 41.7
Pasture: 60.
Specialty: 0.

Livestock Summary

Beef Cattle 0
Dairy Cattle 0
Poultry 0
Swine 31500
Other 0

Manure Production Balance

	Imported	Produced	Exported	Used	Net
kgals	0.	38625.9	0.	40097.8	-1471.9
tons	0.	0.	0.	0.	0.

Plan written 5/10/2012

Valid until 5/10/2015

Signature: _____

Kurt Elmer

Planner

6/22/12

date

Murphy-Brown LLC Farms 8506-8508 Narrative

Three Year NMP Revision

Kurt Elmer (Cert. # 575)

This nutrient management plan is an update for Murphy-Brown LLC farms 8506, 8507 and 8508; covered by permit number VPA010075. These farms are located on Rt. 626 in Southampton County, just east of the intersection with Rt. 623 near Dory. This NMP also includes spread agreement acres owned by Virginia Carolina Holding Co. which is located south of the Murphy Brown LLC site on Skyline Drive in Southampton County. The spread agreement fields owned by Virginia Carolina Holding Co. are denoted by the prefix "L" in this NMP.

Swine waste is stored and treated at this site by three primary anaerobic lagoons that are transferred to a common secondary anaerobic lagoon. Under normal circumstances, effluent from the 6-7-8 second stage anaerobic lagoon is land applied with irrigation equipment to wheat, corn, soybeans, grain sorghum and bermuda hay on the Murphy-Brown LLC owned application fields. However, depending on lagoon levels, weather conditions and crop nutrient needs applications can be made from the primary lagoons using the most current waste analysis for that specific lagoon. Applications will be limited to the remaining nitrogen balance for the current crop in the fields. Under normal circumstances effluent from the farm the 7 primary lagoon is utilized for applications to the Virginia Carolina Holding Co. land (denoted by the prefix "L"). However, depending on lagoon levels, weather conditions and crop nutrient needs applications can be made from the 6-7-8 secondary lagoon using the most current waste analysis. Applications will be limited to the remaining nitrogen balance for the current crop in the fields. Nutrient application on the Virginia Carolina Holding Co. property is not conducted on a continuous basis. Nutrient content of the primary and secondary lagoons on this site are analyzed in the months of March, June and September every year. The most current waste analysis is utilized to calculate nutrient application rates to crops.

Approximately 539 acres of row crop, pasture and hay land is available for land application in this plan. The lands owned by Murphy-Brown LLC totals 254 acres of row crops and bermuda hay. The nutrient balance sheet will reflect manure applications that will meet the nutrient needs of the crops. However, depending on lagoon levels, weather conditions and crop nutrient needs commercial fertilizers may be used in place of manure applications. Commercial fertilize applications will be accounted for in nutrient balance calculations of each crop rotation. (Example: Commercial nitrogen starter may be used when corn is planted, commercial nitrogen may be top dress applied to a wheat crop in the spring if soil conditions are too wet for manure applications, crop nutrient needs will be supplemented with commercial fertilizer applications if lagoons lack the volume of waste water to provide the crop nutrient needs, etc.) Cropping notes reflect guidance to be used when utilizing commercial fertilizers in conjunction with manure applications.

The remaining 285 acres of crop and pasture land in this plan owned by Virginia Carolina Holding Co. (fields are denoted by the "L" prefix). These acres are utilized for manure applications on a limited basis. (Example: high lagoon freeboards created by unusual weather events, lowering lagoon levels for lagoon liner repairs). Commercial fertilizers will be utilized in the place of or in conjunction with manure applications during the life of this plan. Manure applications to the Virginia Carolina Holding Co. land will be preformed with an Aerway drag hose system. Applications to the crop acres will be pre-plant applications. Applications to the pasture acres can be preformed anytime within the application window outlined in the Swine Manure Spreading Schedule of the Special Conditions.

Sub acres are included on the Murphy-Brown LLC land in this plan. These acres are not included under permanent irrigation systems. These sub field acres will be applied to on a limited basis by use of an Aerway drag hose system, liquid manure tanker, or portable irrigation guns. Sub acres will be supplemented with commercial fertilizers to meet crop needs in conjunction with effluent applications. If effluent applications are not made on the sub acres commercial fertilizers will be used to meet crop needs.

Murphy-Brown LLC has adopted two new cropping rotation systems that are not addressed in the special conditions manure spreading schedule for swine. Double crop Grain Sorghum and Soy Beans. The Guidance provided by DCR (below) on manure application timing will be followed for the manure spreading schedule for these two crops.

Double-crop sorghum – (planted after Spring harvest of small grain) Effluent applications may begin after the small grain harvest and no more than 30 days prior to planting of the grain sorghum. Effluent applications may continue until $\frac{1}{2}$ of the plants in the field have headed but not later than August 31. Total N applied cannot exceed nutrient needs less the residual N from previous effluent applications, legumes, etc. as defined in Standards and Criteria, revised October 2005.

Soybeans – (double crop and full season) Effluent applications may begin no more than 30 days prior to planting of the soybeans. However, effluent application is not recommended prior to growth stage V6 (six unfolded trifoliate leaves). Nitrogen needs will be established using expected yield for corn based on the soil productivity for the field. Effluent applications may continue until growth stage R6 (full-seed stage) but not later than September 30.

Smithson Jr., Robert (DEQ)

From: Bowles, Betsy (DEQ)
Sent: Monday, July 18, 2011 11:58 AM
To: ROBritt (ROBritt@murphybrownllc.com)
Cc: Jenkins, Ray (DEQ); Smithson Jr., Robert (DEQ)
Subject: Confirmation of Continuation of VPA Permits

Mr. R.O. Britt,

This email is confirmation of the continuation of the expired Virginia Pollution Abatement (VPA) permits which authorize the pollutant management activities associated with the swine production farms owned and operated by Murphy-Brown, LLC. The VPA applications for the Murphy-Brown, LLC farms were received on March 8th, 2011 prior to the Department set application deadline of March 9th, 2011 and deemed complete prior to the expiration of the permits {PRO farms - May 4, 2011 and TRO farms - May 9, 2011}. The VPA permit regulation allows for the continuation of expiring VPA permits when specific criteria are met (see below). In accordance with 9VAC25-32-130, the expiring VPA permits listed in the table below were automatically continued given that all of the criteria specified in this section were met.

The VPA permits will remain in effect until VPDES CAFO individual permits are issued to cover activities at each of the facilities for which the VPDES applications were submitted.

Permit Number	Region	Facility Name
VPA00573	PRO	Smithfield Carrolls Farms 13 and 14
VPA00574	PRO	Smithfield Carrolls Farms 9 10 and 21
VPA00575	PRO	Smithfield Carrolls Farm 12
VPA00576	PRO	Smithfield Carrolls Farm 15
VPA00577	PRO	Smithfield Carrolls Farms 16 and 17
VPA00578	PRO	Smithfield Carrolls Farms 18 19 and 20
VPA01074	TRO	Smithfield Carroll's Farms 1 - 5 [Proctors Bridge]
VPA01075	TRO	Smithfield Carroll's Farms 6,7,8 [Dory]

Please find below the excerpt and citation of the regulation which authorizes the Department to continue the permits for the facilities allowing them to continue to operate under the expired VPA permits. As a reminder, the continued VPA permits remain effective and enforceable against the permittee.

<http://leg1.state.va.us/cgi-bin/legp504.exe?000+reg+9VAC25-32-130>

9VAC25-32-130. Continuation of expiring VPA permits

- A. Expiring VPA permits are automatically continued pending issuance of a new VPA permit if:
1. The permittee has submitted a timely and complete application as required by this chapter, unless the board has given permission for a later submittal, which shall not extend beyond the expiration date of the original VPA permit; and
 2. The board is unable, through no fault of the permittee, to issue a new VPA permit before the expiration date of the previous VPA permit.
- B. Continued VPA permits remain effective and enforceable against the permittee.
-

Please feel free to contact me if you have any questions.

ATTACHMENT 12

DEFINITIONS OF TERMS

ATTACHMENT 12 -VPDES CAFO FACT SHEET

DEFINITION OF TERMS

Adverse Weather Conditions: means weather conditions that are dangerous or create inaccessibility for personnel, and may include such things as local flooding, high winds, electrical storms, or situations that otherwise make sampling impracticable, such as drought or extended frozen conditions.

Animal Feeding Operation (AFO): means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

(i) Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and

(ii) Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

Agricultural storm water: means storm water that is not the sole result of land application of manure, litter or process wastewater. Where manure, litter or process wastewater has been applied in accordance with a nutrient management plan approved by the Virginia Department of Conservation and Recreation and in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater, a precipitation-related discharge of manure, litter, or process wastewater from land areas under the control of an animal feeding operation is an agricultural storm water discharge.

Best Management Practice (BMP): means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to surface waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Concentrated Animal Feeding Operation (CAFO): means an AFO that is defined as a Large CAFO or as a Medium CAFO or that is designated as a Medium CAFO or a Small CAFO. Any AFO may be designated as a CAFO by the director in accordance with the provisions of 9VAC25-31-130B. (see table below) {Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes.}

Animal Type	Number of Animals (stabled or confined as indicated below)		
	Large	Medium ¹	Small ^{1,2}
Mature Dairy Cattle	700 or more	200 to 699	Less than 200
Cattle (other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs)	1,000 or more	300 to 999	Less than 300
Veal calves	1,000 or more	300 to 999	Less than 300
Swine (weighing over 55 pounds)	2,500 or more	750 to 2,499	Less than 750
Swine (weighing less than 55 pounds)	10,000 or more	3,000 to 9,999	Less than 3,000
Turkeys	55,000 or more	16,500 to 54,999	Less than 16,500
Laying hens or broilers (liquid manure (manure as defined in Part IV AA.) handling systems)	30,000 or more	9,000 to 29,999	Less than 9,000
Chickens other than laying hens (other than a liquid manure (manure as defined in Part IV AA.) handling systems)	125,000 or more	37,500 to 124,999	Less than 37,500
Laying hens (other than a liquid manure (manure as defined in Part IV AA.) handling systems)	82,000 or more	25,000 to 81,999	Less than 25,000
Horses	500 or more	150 to 499	Less than 150
Sheep or Lambs	10,000 or more	3,000 to 9,999	Less than 3,000
Ducks (other than a liquid manure (manure as defined in Part IV AA.) handling systems)	30,000 or more	10,000 to 29,999	Less than 10,000
Ducks (liquid manure (manure as defined in Part IV AA.) handling systems)	5,000 or more	1,500 to 4,999	Less than 1,500

1 Either one of the following conditions are met:

(A) Pollutants are discharged into surface waters (surface waters as defined in Part IV AA.) of the State through a man-made ditch, flushing system, or other similar man-made device; or

(B) Pollutants are discharged directly into surface waters (surface waters as defined in Part IV AA.) of the State which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

2 Must be designated by the Department as a significant contributor of pollutants to surface waters (surface waters as defined in Part IV AA.).

ATTACHMENT 12 -VPDES CAFO FACT SHEET

DEFINITION OF TERMS

Continued...

Land application area: means land under the control of an AFO owner or operator, that is owned, rented, or leased to which manure, litter or process wastewater from the production area may be applied.

Manure: means manure bedding, compost and raw materials or other materials commingled with manure or set aside for disposal.

Measurable Storm Event: means a storm event that results in an actual discharge from the site.

Overflow: means the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained by the structure.

Poultry Waste End-User or End-User: means any recipient of transferred poultry waste who stores or who utilizes the waste as fertilizer, fuel, feedstock, livestock feed, or other beneficial end use for an operation under his control.

Poultry Waste: means dry poultry litter and composted dead poultry.

Process Wastewater: Process wastewater from an AFO means water directly or indirectly used in the operation of the AFO for any of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of the (confined) animals; or dust control. Process wastewater from an AFO also includes any water that comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding.

Production Area: means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage areas include but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions that separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

Runoff Diversion Structures: see Storm Water Diversion Device.

(Storm Event) - 25-year, 24-hour Storm: means precipitation events with a probable recurrence interval of once in twenty five years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961, or equivalent regional or State rainfall probability information developed from this source. In Virginia, the rainfall from a 25-year, 24-hour storm event ranges from four to seven inches depending upon your location in the State.

Storm Water: means storm water run-off, snow melt run-off, and surface run-off and drainage.

Storm Water Diversion Device: means a device or a structure used to change the path of storm water.

Surface Waters: means

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as surface waters under this definition;
5. Tributaries of waters identified in subdivisions 1 through 4 of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in subdivisions 1 through 6 of this definition.

Vegetated Buffer: means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.

Waste: means manure, poultry waste and process wastewater, for the purposes of this permit.